

Answers To Questions Used In

APPLIED BUSINESS

MATHEMATICS

(Part 1 of 2—Pages 1 to 304; Revised 1981)

Section 1.
Part 1a.
Exercise 1.

Unit 1

Unit 1, Section 1.

1-1.	Date	Explanation	Amount
	1981		
	Jan. 7	Luis, take-home pay for week	\$ 170.00
	7	Luis, bonus for the year	450.00
	8	Interest on savings	35.00
	9	Refund on returned gift	8.00
	11	Rosa, take-home pay	112.25
	11	Rosa, tips for week	95.40
		Total	\$ 870.65

1-2.	Date	Explanation	Amount
	1981		
	Apr. 6	Dividend on life insurance	\$ 27.00
	6	Sale of old radio	3.50
	7	Refund on returned dress	56.78
	8	Federal income tax refund	115.32
	9	Repayment of personal loan	25.00
	10	Take-home pay	134.40
		Total	\$ 362.00

1311
1-3. \$ 448.36
47.50
17.89
15.00
+ 5.00
\$ 533.75

2111
1-4. \$ 810.30
346.78
25.00
80.42
+ 475.00
\$ 1,737.50

Unit 1.

Section 1.
Part 1a.
Exercises 2-4.

2

2.	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.
	5	4	1	5	6	5	4	4	6	9
	5	6	9	5	4	8	3	8	1	3
	6	5	9	6	8	4	6	5	8	8
	4	2	1	2	3	3	2	2	1	4
	2	1	8	3	7	3	4	5	5	6
	8	9	1	5	6	0	9	6	3	4
	4	4	5	2	3	5	1	7	6	5
	1	6	3	1	2	6	8	3	2	3
	<u>+5</u>	<u>+7</u>	<u>+2</u>	<u>+7</u>	<u>+4</u>	<u>+4</u>	<u>+2</u>	<u>+8</u>	<u>+7</u>	<u>+7</u>
	40	44	39	36	43	38	39	48	39	49

3-1.	3-2.	3-3.	3-4.	3-5.	3-6.
²²³	³²²	²³²			¹³²
\$ 18.79	\$ 745	\$ 98.45	\$ 55.38	\$ 8.32	\$ 16.75
2.11	23.45	10.63	31.02	11.71	90.34
1.92	74.17	2.82	94.46	91.07	1.03
17.28	76.52	30.26	6.74	87.65	82.11
.55	1.48	81.74	10.23	11.32	20.97
<u>+ 21.05</u>	<u>+ 39.40</u>	<u>+ 26.36</u>	<u>+ 84.17</u>	<u>+ 10.13</u>	<u>+ 15.83</u>
\$ 61.70	\$ 222.47	\$ 250.26	\$ 282.00	\$ 220.20	\$ 227.03

4-1.	Date	Explanation	Amount
	¹⁹⁸⁰ July 1	Interest on savings	\$ 23.48
	7	Salary	250.00
	7	Commission	146.00
	10	Income tax refund	63.00
	15	Dividends on stock	27.50
	21	Salary	250.00
	21	Commission	137.00
	28	Dividend on life insurance policy	+ 43.92
		Total	\$ 940.90

Section 1.

Unit 1.

Part 1a-1b.

Exercises 4-5, 6, 5-1.

3

4-2. \$ ^{33 2} 77.80	4-3. \$ ^{22 2 1} 94.75
87.20	106.20
82.60	83.42
91.43	114.68
10.00	+125.43
45.00	\$ 524.48
+35.97	
\$ 430.00	

4-4. \$ ^{33 2} 7.65	4-5. \$ ³³ 1,572	4-6. \$ ^{23 2} 37.85
55.40	358	65.74
12.75	253	73.39
36.39	237	97.86
15.85	134	+113.85
+9.40	+349	\$ 388.69
\$ 137.44	\$ 2,903	

Date	Explanation	Amount
Apr 6	Clothing	\$ 42.75
6	Car payment	79.35
7	Food	36.89
8	Car repair	24.25
8	Gas and oil	12.00
9	Records	12.42
10	Magazine subscription	7.68
10	Savings deposit	55.00
	Total	\$ 270.34

Unit 6

Section 1.

Part 1b - Review Assignment 1b.

Exercise 5 (for Part 1b),

and Exercises 1-4 (for Review Assignment 1b).

4

$$\begin{array}{r}
 5-2 \quad \$ 204.50 \\
 145.00 \\
 250.00 \\
 55.75 \\
 15.00 \\
 + 15.00 \\
 \hline
 \$ 862.00
 \end{array}$$

$$\begin{array}{r}
 5-3 \quad \$ 130.80 \\
 142.95 \\
 73.00 \\
 12.45 \\
 95.12 \\
 + 31.84 \\
 \hline
 \$ 476.00
 \end{array}$$

$$\begin{array}{r}
 5-4 \quad \$ 36.25 \\
 8.75 \\
 15.57 \\
 15.57 \\
 2.00 \\
 3.75 \\
 \hline
 24.92
 \end{array}$$

$$\begin{array}{r}
 5-5 \quad \$ 234.50 \\
 310.60 \\
 32.14 \\
 34.00 \\
 324.50 \\
 + 227.00 \\
 \hline
 \$ 1,126.53
 \end{array}$$

$$\begin{array}{r}
 5-6 \quad \$ 45.52 \\
 87.75 \\
 126.10 \\
 153.15 \\
 95.70 \\
 + 106.52 \\
 \hline
 \$ 524.53
 \end{array}$$

$$\begin{array}{r}
 217.28 \\
 \hline
 513.21
 \end{array}$$

1. added (a) record of the amount to be added.
 additional (b) 2 figures of combining the numbers
 into one.
 cash receipts record: (c) A written record of cash receipts.
 cash receipts record: (d) A written record of cash taken in.
 Amount addition: (e) The first check for addition.
 amount to be added: (f) The result of addition.

$$\begin{array}{r}
 2 \quad \$ 285.00 \text{ (Rent)} \\
 46.35 \text{ (Furniture)} \\
 39.43 \text{ (Utilities)} \\
 17.65 \text{ (Insurance)} \\
 58.47 \text{ (Auto)} \\
 42.39 \text{ (Food)} \\
 + 12.76 \text{ (Entertainment)} \\
 \hline
 \$ 502.05
 \end{array}$$

$$\begin{array}{r}
 3 \quad \$ 225.00 \\
 300.00 \\
 144.25 \\
 18.95 \\
 75.00 \\
 + 25.00 \\
 \hline
 \$ 788.20
 \end{array}$$

$$\begin{array}{r}
 4 \quad \$ 120.55 \\
 176.50 \\
 12.75 \\
 182.70 \\
 178.20 \\
 184.60 \\
 180.50 \\
 + 189.75 \\
 \hline
 \$ 1,463.55
 \end{array}$$

Section 1.

Review Assignment 1b - Part 1c.

Exercises 5-6 (for Review Assignment 1b),
and Exercise 6 (for Part 1c).

$$\begin{array}{r}
 5. \quad \$ 9.25 \quad \$ 7.50 \\
 \quad 7.50 \quad +13.25 \\
 \quad +13.25 \quad \underline{\$ 20.75} \\
 \quad \underline{\$ 30.00}
 \end{array}$$

Jack earned \$20.75 during the week; he has \$30.00 to spend.

$$\begin{array}{r}
 6. \quad 100 \quad 148 \\
 \quad 148 \quad 124 \\
 \quad 124 \quad 136 \\
 \quad 136 \quad 142 \\
 \quad 142 \quad +160 \\
 \quad +160 \quad \underline{710} \\
 \quad \underline{810}
 \end{array}$$

The school business club
bought 710 boxes during the
year and have for sale 810.

$$\begin{array}{r}
 6-1. \quad 6+4+5=15 \\
 \quad 7+3+6=16 \\
 \quad 8+2+5=15 \\
 \quad \underline{21+9+16=46}
 \end{array}$$

$$\begin{array}{r}
 6-2. \quad 31+23=54 \\
 \quad 21+19=40 \\
 \quad 26+85=111 \\
 \quad 33+95=128 \\
 \quad \underline{111+222=333}
 \end{array}$$

$$\begin{array}{r}
 6-3. \quad 26+44+37=107 \\
 \quad 31+33+56=120 \\
 \quad 73+35+56=164 \\
 \quad 17+53+37=107 \\
 \quad \underline{147+165+186=498}
 \end{array}$$

$$\begin{array}{r}
 6-4. \quad 7+1+3+9=20 \\
 \quad 5+5+6+8=24 \\
 \quad 3+8+2+3=16 \\
 \quad \underline{15+14+11+20=60}
 \end{array}$$

$$\begin{array}{r}
 6-5. \quad 93+122=215 \\
 \quad 237+154=391 \\
 \quad 593+47=640 \\
 \quad 13+189=202 \\
 \quad \underline{936+512=1,448}
 \end{array}$$

$$\begin{array}{r}
 6-6. \quad 122+39+221=382 \\
 \quad 140+66+84=290 \\
 \quad 66+300+219=585 \\
 \quad 115+79+6=200 \\
 \quad \underline{443+484+530=1,457}
 \end{array}$$

Unit 1.

Section 1.

Part 1c-1d.

Exercise 7 (for Part 1c),
and Exercises 8-9 (for Part 1d).

6

7-1.

Week	Types of Payment					Total Payments
	Housing	Food	Transportation	Utilities	Insurance	
1-7	\$ 216.00	\$ 57.50	\$ 22.25	\$ 13.35	\$ 20.00	\$ 333.10
8-14		33.80	5.25	21.28		60.23
15-21		31.53		15.27		46.80
22-28		40.75	29.83	12.70	20.00	103.50
Totals	\$ 216.00	\$ 163.78	\$ 57.23	\$ 63.70	\$ 40.00	\$ 544.80

7-2.

Week	Types of Payment					Total Payments
	Food	Clothing	Transportation	Utilities	Insurance	
1-7	\$ 15.00	\$ 25.00	\$ 7.25	\$ 3.75	\$ 5.00	\$ 56.00
8-14			6.22	1.25	5.00	35.27
15-21	10.80	17.15	1.53	6.02	5.00	50.50
22-28	13.66	5.29	12.35	2.75	5.00	39.05
29-31	4.13		5.74		2.80	10.15
Totals	\$ 62.47	\$ 57.94	\$ 44.19	\$ 14.05	\$ 23.00	\$ 198.65

8-1. true 8-2. true 8-3. false 8-4. true
 8-5. true 8-6. true 8-7. true 8-8. false
 8-9. true 8-10. true 8-11. false 8-12. true
 8-13. false 8-14. false 8-15. true 8-16. false
 8-17. true 8-18. false 8-19. true 8-20. true
 8-21. true

9-1. $5+4=4+5$ 9-2. $8+7=7+8$ 9-3. $9+6=6+9$
 9-4. $6 \times 4 = 4 \times 6$ 9-5. $6+3=9$ 9-6. $4+5=7+2$
 9-7. $3+7=5+5$ 9-8. $4+8=10+2$ 9-9. $9-6=7-4$
 9-10. $3 \times 5=15$ 9-11. $4 \times 4=16$ 9-12. $9 \times 2=3 \times 6$

Section 1-2.

Unit 1.

Review Assignment 1d- Part 2a.

Exercises 1-4 (for Review Assignment 1d),
and Exercise 1 (for Part 2a).

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1. horizontal addition: (a) Adding across.
number sentence: (e) Says two numbers are equal.
numeral: (b) A name for a number.
open sentence: (d) Has a missing numeral.
vertical addition: (c) Adding up and down.

$$\begin{array}{lll} 2. & 9+4=4+9 & 5+7=10+2 & 3 \times 3=9 \\ & 5 \times 3=3 \times 5 & 8+2=5+5 & 6 \times 2=12 \end{array}$$

Week	Types of Payment					Total Payments
	Housing	Food	Car	Savings	Other	
Wk. 1-7	\$ 125.00	\$ 35.00	\$ 8.50	\$ 20.00	\$ 30.50	\$ 219.00
8-14		46.20	18.00		10.75	74.95
15-21	125.00	38.40	13.30	20.00	5.30	202.00
22-28		42.60	10.20		12.10	64.90
Totals	\$ 250.00	\$ 162.20	\$ 50.00	\$ 40.00	\$ 58.65	\$ 560.85

$$\begin{array}{r} 311 \\ \$ 160.00 \\ 130.50 \\ \hline 155.25 \\ 164.00 \\ \hline + 96.50 \\ \hline \$ 706.25 \end{array}$$

Section 2.

$$\begin{array}{ll} 1-1. & \text{Ten-dollar bills: } \$ 30.00 \\ & \text{Five-dollar bills: } 10.00 \\ & \text{Quarters: } .75 \\ & \text{Dimes: } .50 \\ & \text{Checks: } 156.50 \\ & + 10.00 \\ & \hline \text{Total: } & \$ 207.75 \end{array}$$

Unit 1. Section 2.
Part 2a.
Exercises 1, 2.

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Exercise 1
(continued)

12. Twenty-dollar bills: \$ 20.00
Ten-dollar bills: 30.00
Five-dollar bills: 20.00
One-dollar bills: 17.00
Half-dollar bills: 1.50
Quarters: 1.25
Dimes: .50
Nickels: .20
Checks: 17.50
25.00
43.50
+ 34.75
Total: \$ 311.20

13. Ten-dollar bills: \$ 40.00
Five-dollar bills: 45.00
One-dollar bills: 23.00
Quarters: 1.75
Dimes: .60
Nickels: .40
Pennies: .05
Checks: 1.75
2.50
+ 3.25
Total: \$ 118.30

2-1. Mar. 1 Balance \$ 137.00
5 Deposit 43.00
Balance 180.00
12 Check 21.50
Balance 158.50

Mar. 15 Check \$ 46.40
Balance 112.10
18 Deposit 87.50
Balance 199.60
29 Check 79.30
Balance \$ 120.30

2-2	Previous Balance	Deposits	Checks Issued	Final Balance
a.	\$ 285.60	\$ 60.00	\$ 4.20; \$ 10.30; \$ 41.00	\$ 290.10
b.	925.25	\$ 62.75	\$ 52.00; \$ 13.50; \$ 8.70; \$ 5.75	908.05
c.	536.28	\$ 39.42; \$ 62.25	\$ 10.35; \$ 7.45; \$ 45.70	574.45
d.	974.50	None	\$ 12.46; \$ 9.58; \$ 21.20; \$ 5.75	925.51
e.	353.52	\$ 113.98	\$ 45.10; \$ 8.77; \$ 5.42; \$ 66.89	341.36

Section 2,

Part 2a - Review
Assignment 2a.

Exercise 2 (for Part 2a).

Exercises 1-6 (for Review Assignment 2b).

Unit 1.

9

$$\begin{array}{r} 3. \ \$793.40 \\ + 185.60 \\ \hline 979.00 \\ - 15.00 \\ \hline 964.00 \\ - 49.50 \\ \hline 914.50 \\ - 125.00 \\ \hline \$789.50 \end{array}$$

$$\begin{array}{r} 4. \ \$175.32 \\ + 99.80 \\ \hline 275.12 \\ + 19.25 \\ \hline 294.37 \\ - 27.83 \\ \hline 266.54 \\ - 35.64 \end{array}$$

balance: (c) The amount of money in an account.

check: (e) An order to pay money.

check stub: (d) A record of deposits and checks.

deposit slip: (b) A form used to list all money deposited.

transit number: (a) A means of identifying checks on deposit slips.

a. $16 = 16 + 0$ b. $13 + 14 = 27$ c. $1 + 16 = 17$

d. $8 + 10 = 10 + 8$ e. $7 + 3 = 6 + 4$ f. $18 - 8 = 10$

g. $16 - 4 = 12$ h. $3 \times 9 = 9 \times 3$ i. $4 \times 8 = 32$

$$\begin{array}{r} 3. \ \$983.50 \\ + 74.65 \\ \hline 1,058.15 \\ - 342.20 \\ \hline \$715.95 \end{array}$$

$$\begin{array}{r} 4. \ \$4.89 \\ - 3.36 \\ \hline \$1.44 \end{array}$$

$$\begin{array}{r} 5. \ \$5,690 \\ - 4,550 \\ \hline \$1,140 \end{array}$$

$$\begin{array}{r} 6. \ \$58.20 \\ - 42.75 \\ \hline \$12.45 \end{array} \quad \begin{array}{r} \$12.45 \\ - 2.00 \\ \hline \$10.45 \end{array}$$

When Barbara paid her brother
\$2.00, she had \$10.45 left.
The difference is \$12.45.

Unit 1.

Section 2.

Part 2b - Review Assignment 2b.

Exercises 3, 4, and 5 (for Part 2b);

Exercise 1 (for Review Assignment 2b).

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3-1. $9-8=1$	3-2. $6=14-8$	3-3. $16=9+7$	3-4. $6+9=15$
3-5. $8=0+8$	3-6. $8-0=8$	3-7. $22-8=14$	3-8. $20-7=13$
3-9. $8+7=15$	3-10. $9+2=11$	3-11. $22=28-6$	3-12. $17=2+15$
3-13. $11=3+8$	3-14. $13=7+6$	3-15. $14-0=14$	3-16. $10+0=10$
3-17. $31=31-0$	3-18. $15=15+0$	3-19. $15-7=8$	3-20. $8+0=8$

4-1. $\begin{array}{r} 32,756 \\ - 4,254 \\ \hline 28,502 \end{array}$	4-2. $\begin{array}{r} \$28,485.34 \\ - 2,670.49 \\ \hline \$25,814.85 \end{array}$	4-3. $\begin{array}{r} \$56,318.48 \\ - 3,908.69 \\ \hline \$52,409.79 \end{array}$	4-4. $\begin{array}{r} \$35,405.36 \\ - 5,826.37 \\ \hline \$29,578.99 \end{array}$
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4-5. $\begin{array}{r} 51,006 \\ - 4,936 \\ \hline 46,070 \end{array}$	4-6. $\begin{array}{r} \$75,800.00 \\ - 24,847.58 \\ \hline \$50,952.42 \end{array}$	4-7. $\begin{array}{r} \$63,003.26 \\ - 46,606.87 \\ \hline \$16,396.39 \end{array}$	4-8. $\begin{array}{r} \$20,220.20 \\ - 15,738.49 \\ \hline \$4,481.71 \end{array}$
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5-1. $\begin{array}{r} \$1.20 \\ - .15 \\ \hline \$1.05 \end{array}$	5-2. $\begin{array}{r} \$52.25 \\ - 1.05 \\ \hline \$51.20 \end{array}$	5-3. $\begin{array}{r} \$243.80 \\ - 72.60 \\ \hline \$171.20 \end{array}$
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5-4. $\begin{array}{r} 22 \\ - 4 \\ \hline 18 \end{array}$	5-5. $\begin{array}{r} \$57.50 \\ 164.00 \\ + 26.00 \\ \hline \$247.50 \end{array}$	$\begin{array}{r} \$940.60 \\ - 247.50 \\ \hline \$693.10 \end{array}$
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Ostrom's take-home pay was \$693.10.

Review Assignment 2b.

1. difference: (f) The missing addend in subtraction.
- gross: (b) Net plus deductions.
- minuend: (d) The total in subtraction.
- net: (a) Gross less deductions.
- subtraction: (c) The reverse of addition.
- subtrahend: (e) The known addend in subtraction.

Sections 2-3.

Review Assignment 2b - Part 3a,

Exercises 2-10 (for Review Assignment 2b),

Exercises 1 (for Part 3a).

Unit 1

11

2. a. $9 + 6 = 15$ b. $12 + 8 = 20$ c. $20 - 5 = 15$
 d. $25 - 7 = 18$ e. $3 \times 4 = 12$ f. $4 \times 5 = 20$

3. $\begin{array}{r} \$35.42 \\ - 1.06 \\ \hline \$34.36 \end{array}$ 4. $\begin{array}{r} \$348.00 \\ - 29.65 \\ \hline \$318.35 \end{array}$

5. a. $\begin{array}{r} \$1,187.50 \\ - 1,095.00 \\ \hline \$892.50 \end{array}$ b. $\begin{array}{r} \$892.50 \\ - 173.40 \\ \hline \$719.10 \end{array}$ 6. $\begin{array}{r} \$684.75 \\ + 193.50 \\ \hline 878.25 \\ - 752.86 \\ \hline \$125.39 \end{array}$

7. $\begin{array}{r} \$27.64 \\ + 50.00 \\ \hline \$77.64 \end{array}$ 8. $\begin{array}{r} \$77.64 \\ - 18.35 \\ \hline \$59.29 \end{array}$ The amount Burt
withdrew was \$125.39.

9. $\begin{array}{r} \$78.00 \\ + 542.00 \\ \hline \$620.00 \end{array}$ 10. $\begin{array}{r} \$670.00 \\ - 94.25 \\ \hline \$575.75 \end{array}$

Section 3.

Martin Felsenfeld Reconciliation Statement

May 31, 1981

Checkbook balance:	\$222.90	Bank statement balance:	\$248.03
Less:		Less outstanding checks:	
Service charge	1.30	#56	\$18.45
Correct checkbook		#62	7.98
balance	\$221.60		26.43
		Available bank balance	\$221.60

Unit 1. Section 3.
Part 3a.
Exercise 11

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1-2

Martin Felsenfeld Reconciliation Statement July 31, 1980			
Checking balance	\$568.41	Bank statement balance	\$568.41
Less:		Outstanding checks	
Service charge	1.10	#21	\$3.98
Correct check		#23	35.42
Balance	\$567.31	#25	26.95
			66.35
		Adjusted bank balance	\$501.86

1-3

Martin Felsenfeld Reconciliation Statement Aug. 31, 1980			
Checking balance	\$39.91	Bank statement balance	\$91.11
Less:		Outstanding checks	
Service charge	1.75	#75	\$17.21
Correct check		#75	33.76
Balance	\$38.16	#76	6.99
		#77	2.04
			60.9
		Adjusted bank balance	\$38.16

1-4

Martin Felsenfeld Reconciliation Statement Sep. 30, 1980			
Checking balance	\$633.34	Bank statement balance	\$740.04
Less:		Outstanding checks	
Service charge	2.20	#93	\$3.48
Correct check		#94	7.79
Balance	\$631.14	#95	45.60
		#96	1.98
			108.85
		Adjusted bank balance	\$631.14

Section 3.

Unit 1.

Part 3a - Review Assignment 3a.

Exercise 1 (for Part 3a);

and Exercise 1-2 (for Review Assignment 3b).

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Otto Waldo Reconciliation Statement July 31, 1980

Checkbook balance	\$285.92	Bank statement balance	\$343.58
Less:		Less outstanding checks:	
Service charge	2.40	#485	\$29.55
Correct checkbook		#493	18.75
balance	\$283.52	#495	11.76
			60.06
		Available book balance	\$283.52

Wilma Stein Reconciliation Statement October 31, 1980

Checkbook balance	\$750.17	Bank statement balance	\$846.37
Less:		Less outstanding checks:	
Service charge	1.50	#38	\$47.50
Correct checkbook		#39	16.25
balance	\$748.67	#42	33.95
			97.70
		Available book balance	\$748.67

1. a. $17 + 8 = 25$ b. $20 + 10 = 30$ c. $35 - 15 = 20$
d. $25 - 10 = 15$ e. $5 \times 8 = 40$ f. $6 \times 3 = 8$

Warren Hoffman Reconciliation Statement July 31, 1980

Checkbook balance	\$542.13	Bank statement balance	\$583.91
Less:		Less outstanding checks:	
Service charge	1.56	#110	\$13.25
Correct checkbook		#114	30.09
balance	\$540.57		43.34
		Available book balance	\$540.57

Unit 1

Section 3.

Review Assignment 3a - Part 3b.

Exercise 3-6 (for Review Assignment 3a);
and
Exercise 2 (for Part 3b).

14

3. \$ 200.00	4. a. \$ 1,677.60	b. \$ 203.35
+ 63.72	- 1,439.50	+ 121.25
<u>\$ 263.72</u>	<u>\$ 203.35</u>	<u>\$ 324.60</u>

5. \$ 384.25	5. ⁸ 459.75	a. \$ 442.80
+ 75.00	- 16.45	b. Too little cash;
<u>\$ 459.25</u>	<u>\$ 442.80</u>	by 25¢.

Post

2-1. Bank statement balance \$546.10	
Less outstanding checks:	
#1 \$47.53	
#2 1.00	
#3 51.80	100.33
Sub-total	446.10
Add:	
Deposit not recorded 95.00	
Available bank balance \$535.10	

2-2. Bank statement balance \$170.35	
Less outstanding checks:	
#4 \$4.25	
#5 15.20	
#6 6.75	26.20
Sub-total	138.80
Add:	
Deposit not recorded 25.00	
Available bank balance \$163.05	

2-3. Bank statement balance \$756.65	
Less outstanding checks:	
#7 \$35.20	
#8 6.20	
#9 24.97	
#10 6.05	72.42
Sub-total	635.20
Add:	
Deposit not recorded 153.00	
Available bank balance \$785.25	

2-4. Bank statement balance \$650.00	
Less outstanding checks:	
#45 \$2.41	
#46 18.58	
#48 40.61	61.60
Sub-total	60.59
Add:	
Deposit not recorded 85.00	
Available bank balance \$734.41	

Section 3.
Part 3b.
Exercise 3.

Unit 1.

15

3-1.	Checkbook balance:	\$549.00
	Less: Service charge	\$1.20
	Check not recorded	16.80 18.00
	Sub-total:	531.00
	Add: Deposit omitted	\$52.00
	Amount on check	
	stub #27 (too large)	.90 52.90
	Correct checkbook balance:	\$583.90

3-2.	Checkbook balance:	\$856.00
	Less: Service charge	\$2.40
	Check not recorded	20.00 22.40
	Sub-total:	833.60
	Add: Deposit omitted	\$30.00
	Amount on check	
	stub #93 (too large)	3.60 33.60
	Correct checkbook balance:	\$867.20

3-3.	Checkbook balance:	\$763.52
	Less: Service charge	\$1.20
	Amount on check	
	stub #63 (too small)	9.90 11.10
	Sub-total:	752.42
	Add: Deposit	
	not recorded	120.00
	Correct checkbook balance:	\$872.42

3-4.	Checkbook balance:	\$400.21
	Less: Service charge	\$1.65
	Deposit recorded	
	twice in checkbook	25.00
	Check not recorded	12.99 39.64
	Correct checkbook balance:	\$360.57

3-5.	Checkbook balance:	\$723.63
	Less: Service charge	\$2.76
	Amount on check	
	stub #433 (too small)	.18 2.94
	Correct checkbook balance:	\$720.69

3-6.	Checkbook balance:	\$369.82
	Add:	
	Deposit not recorded:	\$28.87
	Amount on check	
	stub #148 (too large)	9.00 37.87
	Correct checkbook balance:	\$407.69

Chart 1

Section 3.
Part 3b.
Exercise 4.

16

Part 3b
(cont.) 4.1

Martin Felsenfeld Reconciliation Statement February 28, 1981	
Checkbook balance: \$626.58	Bank statement balance: \$737.71
Less: Bank charge 1.65	Less: Outstanding checks
Sub-total: 624.93	#11 \$15.60
Add:	#12 1.99
Deposit omitted 40.00	#13 9.60
	#14 45.80
	<u>72.99</u>
Correct checkbook bal. \$664.93	Available bank balance: \$664.93

4.2

Martin Felsenfeld Reconciliation Statement February 28, 1981	
Checkbook balance: \$315.42	Bank statement balance: \$353.00
Less:	Less: Outstanding checks
Service charge \$2.25	#15 \$27.16
Deposit recorded	#16 10.80
Twice on checkbook 8.00	#17 5.67
<u>10.25</u>	#18 4.20
	<u>47.83</u>
Correct checkbook balance: \$305.17	Available bank balance: \$305.17

<p>1-3. Martin Felsenfeld Reconciliation Statement February 28, 1981</p>	
Checkbook balance: \$ 318.83	Bank statement balance: \$ 428.01
Less: Service charge 1.20	Less: Outstanding checks
	#19 \$ 36.12
	#20 20.50
	#21 123.00
	#22 5.76
	<u>185.38</u>
	Sub-total: 242.63
	Add: Deposit not recorded 75.00
Correct checkbook balance: \$317.63	Available bank balance: \$317.63

<p>4. Martin Felsenfeld Reconciliation Statement February 28, 1981</p>	
Checkbook balance: \$ 131.64	Bank statement balance: \$ 336.29
Less: Service charge .90	Less: Outstanding checks
Sub-total: 130.74	#23 \$ 33.06
Add:	#24 5.24
Deposit not recorded 100.00	#25 67.20
	<u>105.55</u>
Correct checkbook balance: \$230.74	Available bank balance: \$230.74

Unit 1. Section 3.
Part 3b.
Exercise 4.

18

4.5.

Martin Felsenfeld
Reconciliation Statement
February 26, 1981

Check book balance: \$ 200.10	Bank statement balance: \$ 257.
Less: Service charge \$.70	Less: Outstanding checks
Check not recorded 3.25	#26 \$ 8.75
3.95	#27 30.18
	#28 <u>22.50</u>
	<u>61.4</u>

Correct check book bal. \$ 196.15 Available bank balance \$ 196.

4.6.

Martin Felsenfeld
Reconciliation Statement
February 28, 1981

Check book balance \$ 859.37	Bank statement balance \$ 858.
Less: Service charge \$.70	Less: Outstanding checks
Correction of error (Feb #25 transposed) .90	#29 \$ 60.80
	#30 42.75
	#31 <u>33.51</u>
	<u>137.</u>

Correct check book bal. \$ 858.77 Available bank balance \$ 858.

Section 3.
Part 3b.
Exercise 4.

Unit 1.

19

4-7.

Alma Janier
Reconciliation Statement
June 30, 1980

Checkbook balance: \$684.10	Bank statement balance: \$698.53
Less: Service charge 2.00	Less outstanding checks:
	#146 \$ 7.86
	#151 11.89
	#154 23.16 42.91
	Sub-total: 655.62
	Add: Deposit not recorded 26.48
Correct checkbook balance: \$682.10	Available bank balance: \$682.10

4-8.

Chris Allen
Reconciliation Statement
July 30, 1980

Checkbook balance: \$84.26	Bank statement balance: \$93.88
Less:	Less outstanding checks:
Deposit recorded	#24 \$1.75
twice in checkbook 18.13	#25 26.00 27.75
Correct checkbook balance: \$66.13	Available bank balance: \$66.13

Unit 1:

Section 3.

Part 3b.

Exercise 4.

20

4-9

Lee Winters Reconciliation Statement April 30, 1981	
Checking balance \$506.21	Bank statement balance \$514.45
Less:	Less outstanding checks
U.S. Savings Bond 18.75	#337 \$14.85
	#340 4.95
	#342 7.23
	<u>27.03</u>
Corrected balance \$487.46	Available bank balance \$487.46

4-10

Paul Kirby Reconciliation Statement May 31, 1980	
Checking balance \$424.15	Bank statement balance \$422.35
Less:	Less outstanding checks
Deposit \$1.30	#186 \$35.00
Amount on hand	#187 11.53
Stub #177 (top mail) 90 2.40	<u>46.53</u>
Corrected checking balance \$421.78	Available bank balance \$421.78

Section 3.

Review Assignment 3B.

Exercises 1-5.

Unit 1

21

1. bank statement: (c) Report to the depositor.
 canceled check: (b) Paid and marked check.
 outstanding check: (a) Unpaid check.
 reconciliation statement: (e) Form used to make
 balances agree.
 service charge: (c) Deduction for handling account.

2. a. $10 + 7 = 17$ b. $25 - 20 = 5$ c. $6 \times 8 = 48$
 d. $18 \div 6 = 3$ e. $22 - 0 = 22$ f. $0 + 41 = 41$

Oliver Marshall Reconciliation Statement June 30, 1980	
Checkbook balance: \$694.28	Bank statement balance: \$758.49
Less: Service charge 1.37	Less outstanding checks:
	#169 \$24.84
	#184 8.55
	#188 32.19
	65.58
Correct checkbook balance: \$692.91	Available bank balance: \$692.91

4. a. $\begin{array}{r} 2,456.75 \\ + 9,543.50 \\ \hline \$12,000.25 \end{array}$ b. $\begin{array}{r} 12,000.25 \\ - 648.50 \\ \hline \$11,351.75 \end{array}$

5. $\begin{array}{r} \$1,835 \\ + 46,786 \\ \hline \$48,621 \end{array}$ $\begin{array}{r} \$48,621 \\ - 1,548 \\ \hline \$47,073 \end{array}$ a total of \$47,073 was used during the year.

Unit # 1.

Section 3.

Review Assignment 32.

Exercises 6-8.

22

Review Assignment 32.

$$\begin{array}{rcl}
 6. & a. & \$ 9,488.86 \\
 & & - 4,341.50 \\
 & & \hline
 & & \$ 5,097.36
 \end{array}
 \qquad
 \begin{array}{rcl}
 b. & & \$ 89,138.86 \\
 & & - 3,775.20 \\
 & & \hline
 & & \$ 5,663.66
 \end{array}$$

$$\begin{array}{rcl}
 7. & \$ 85,972 & \$ 148,285 \\
 & + 50,150 & - 135,122 \\
 & \hline
 & \$ 135,122 & \$ 8,163
 \end{array}$$

The shoe department's net income was \$8,163.

8.

Ruth Brin Reconciliation Statement April 29, 1980

Checkbook balance: \$762.50	Bank statement balance: \$681.6
Less:	Less outstanding checks:
Service charge <u>2.10</u>	#88 \$22.50
	#94 119.62
	#95 37.83
	<u>179.95</u>
	Sub-total: 501.6
	Add: Deposit not recorded 258.7
Correct checkbook bal: \$760.40	Available bank balance: 760.4

Unit 2, Section 4.

23

- 1-1. meter; m. 1-2. 39 inches.
1-3. A decimeter is .1 (one-tenth) meter.
A centimeter is .01 (one-hundredth) meter.
A millimeter is .001 (one-thousandth) meter.
1-4. A dekameter is equal to 10 meters.
A hectometer is equal to 100 meters.
A kilometer is equal to 1000 meters.
1-5. millimeter; mm 1-6. centimeter; cm
1-7. kilometer; km
1-8. There are 100 centimeters in a meter.
1-9. There are 1000 meters in a kilometer.
1-10. The terms called "decimeter," "dekameter,"
and "hectometer," are seldom used.
1-11. When a metric number has more than three
digits, use a space, not a comma, to separate
after every third digit, starting to the right.

- 2-1. a. $1\text{ m} = .1\text{ dm}$ 2-2. a. $1\text{ km} = 1000\text{ m}$
b. $1\text{ m} = 100\text{ cm}$ b. $1\text{ dm} = .1\text{ m}$
c. $1\text{ m} = .001\text{ mm}$ c. $1\text{ cm} = .01\text{ m}$
d. $1\text{ dm} = 10\text{ cm}$ d. $1\text{ mm} = .001\text{ m}$
e. $1\text{ dm} = 100\text{ mm}$ e. $1\text{ cm} = .1\text{ dm}$

- 2-3. a. $2\text{ km} = 2000\text{ m}$ 3-1. a. $1\text{ m} = 100\text{ cm}$
b. $2000\text{ m} = 2\text{ km}$ b. $100\text{ cm} = 1\text{ m}$
c. $3\text{ m} = .03\text{ km}$ c. $1\text{ m} = 1000\text{ mm}$
d. $300\text{ m} = .3\text{ km}$ d. $1000\text{ mm} = 1\text{ m}$
e. $1000\text{ mm} = 1\text{ m}$ e. $10\text{ cm} = 100\text{ mm}$

Unit 2. Section 4
Exercises 3-4.

24.

Exercise 3
(continued)

3-2. a. $1 \text{ km} = 1000 \text{ m}$

b. $1000 \text{ m} = 1 \text{ km}$

c. $5 \text{ cm} = 50 \text{ mm}$

d. $50 \text{ cm} = 500 \text{ mm}$

e. $3 \text{ m} = 3000 \text{ mm}$

3-3. a. $150 \text{ cm} = 1.5 \text{ m}$

b. $6000 \text{ m} = 6 \text{ km}$

c. $2500 \text{ m} = 2.5 \text{ km}$

d. $8.5 \text{ km} = 8500 \text{ m}$

e. $0.5 \text{ cm} = 5 \text{ mm}$

4-1. a. 5 km

1 km

$+ 2 \text{ km}$

8 km

b. 2.7 m

3.3 m

$+ 1.5 \text{ m}$

7.5 m

c. 4.25 km

2.30 km

3.00 km

$+ .40 \text{ km}$

9.95 km

d. $5 \text{ m} = 5.0 \text{ m}$

$60 \text{ cm} = .6 \text{ m}$

$+ 20 \text{ cm} = + .2 \text{ m}$

5.8 m

e. $4 \text{ km} = 4000 \text{ m}$

$5 \text{ km} = 5000 \text{ m}$

$+ 500 \text{ m} = + 500 \text{ m}$

9500 m

4-2. a. 60 cm

$- 45 \text{ cm}$

15 cm

b. 575 m

$- 4.25 \text{ m}$

2.50 m

c. 28.6 km

$- 14.5 \text{ km}$

13.5 km

d. $325 \text{ m} = 325.0 \text{ m}$

$- 40 \text{ cm} = - .4 \text{ m}$

324.6 m

e. $20 \text{ cm} = 200 \text{ mm}$

$- 125 \text{ mm} = - 125 \text{ mm}$

75 mm

f. $1 \text{ km} = 1000 \text{ m}$

$- 300 \text{ m} = - 300 \text{ m}$

700 m

4-3. a. 12 m

$\times 5$

60 m

b. 50 km

$\times 12$

600 km

c. 200 mm

$\times 5$

1000 mm

d. 5.3 cm

$\times 2$

10.6 cm

e. 12.24 m

$\times 3$

36.72 m

f. 30 km

$\times 0.5$

15 km

Section 4.
Exercises 4-6.

Unit 2

25

4-4. a. $\begin{array}{r} 4m \\ 5 \overline{)20m} \end{array}$

b. $\begin{array}{r} 2cm \\ 4 \overline{)8cm} \end{array}$

c. $\begin{array}{r} 140mm \\ 3 \overline{)420mm} \end{array}$

d. $\begin{array}{r} 200mm \\ 6 \overline{)1200mm} \end{array}$

12.

5-1. $\begin{array}{r} 3.50m \\ 7.75m \\ .50m \\ +21.50m \\ \hline 33.25m \end{array}$

3

5-2. $\begin{array}{r} 4.7m \\ 3.3m \\ 1.4m \\ 5.2m \\ 4.9m \\ +0.5m \\ \hline 20.0m \end{array}$

a. 20m
b. \$20.00

5-4. $\begin{array}{r} 120cm \\ \times 5 \\ \hline 600cm \end{array}$

4 9 10

5-3. $\begin{array}{r} 500.0m \\ -125.5m \\ \hline 374.5m \end{array}$

5-5. 3

a. 600cm
b. \$12.00

560 km $\overline{)1680}$ km (because with 600 cm = 6m,
3 days. $6 \times \$2.00 = \12.00)

5-1. $\begin{array}{r} 300km \\ \times .62 \\ \hline 600 \\ 1800 \\ \hline 186.00km \end{array}$

6-2. $\begin{array}{r} 50km \\ \times .62 \\ \hline 100 \\ 300 \\ \hline 31.00km \end{array}$

6-3. $\begin{array}{r} 100m \\ \times 39.37 \\ \hline 3937.00m \end{array}$

5-4. $\begin{array}{r} 600km \\ .62 \overline{)372.00} \end{array}$

6-5. $\begin{array}{r} 400cm \\ .39 \overline{)156.00} \end{array}$

Unit 2.

Section 4.

Review Assignment 4,
Exercises 1-6.

26

Review
Assignment 4.

1. cm: (d) The symbol for centimeter.
 km: (e) The symbol for kilometer.
 meter: (a) A basic measure of length.
 metric system: (c) A system of measures used in most of the world.
 mm: (b) The symbol for millimeter.

$$\begin{array}{r}
 2. \quad 300 \text{ mm} \\
 200 \text{ mm} \\
 100 \text{ mm} \\
 150 \text{ mm} \\
 + 200 \text{ mm} \\
 \hline
 950 \text{ mm}
 \end{array}$$

$$\begin{array}{r}
 3. \quad 100 \text{ cm} \quad 200 \text{ cm} \\
 \times .39 \quad \times .39 \\
 \hline
 39 \text{ in.} \quad 78 \text{ in.}
 \end{array}$$

The size is 39 in. by 78 in.

$$4. a. 118 \times \$2.00 = \$23.60$$

$$b. \$28.50 - \$23.60 = \$4.90$$

$$a. 950 \text{ mm}$$

$$b. \$47.50$$

$$(\$50.00 \times .95 = \$47.50)$$

$$\begin{array}{r}
 5. \quad \$15,996 \\
 + 9,712 \\
 \hline
 \$25,708
 \end{array}$$

$$\begin{array}{r}
 7 \overline{) 28,514} \\
 \underline{- 25,708} \\
 \$2,806
 \end{array}$$

North's net
income \$2,856.

$$\begin{array}{r}
 6. \quad \$51,788 \\
 + 19,536 \\
 \hline
 \$71,324
 \end{array}$$

$$\begin{array}{r}
 a. \quad \$71,324 \\
 \underline{- 53,650} \\
 \$17,674
 \end{array}$$

$$\begin{array}{r}
 b. \quad \$28,504 \\
 \underline{- 17,674} \\
 \$10,830
 \end{array}$$

Section 5.

27

- 1-1. Square meter; m^2 .
- 1-2. Square yard; is equivalent to 1.20 square yards for 1 square meter.
- 1-3. The six prefixes are milli, centi, deci, deca, hecto, and kilo.
- 1-4. Hectare (ha) and square kilometer (km^2).
- 1-5. Hectometer (hm^2).

$$\begin{array}{ll}
 2-1. a. cm^2 = 100 mm^2 & 2-2. a. 0.5 m^2 = 5000 cm^2 \\
 b. 1 m^2 = 10000 cm^2 & b. 0.5 m^2 + 0.25 m^2 = 0.75 m^2 \\
 c. 1 km^2 = 100 ha & c. 50 mm^2 + 50 mm^2 = 1 cm^2 \\
 d. 1 cm^2 = 0.0001 m^2 & d. 25 m^2 - 10 m^2 = 15 m^2 \\
 e. 1 ha = 10000 m^2 & e. 50 m^2 \times 10 = 500 m^2 \\
 f. 1 km^2 = 1000000 m^2 & f. 8 km^2 \div 4 = 2 km^2
 \end{array}$$

$$\begin{array}{lll}
 3-1. a. \begin{array}{r} 1 km^2 \\ 5 km^2 \\ + 6 km^2 \\ \hline 12 km^2 \end{array} & b. \begin{array}{r} 50 ha \\ 25 ha \\ + 25 ha \\ \hline 100 ha \end{array} & c. \begin{array}{r} 500 cm^2 = 500 cm^2 \\ + 100 mm^2 = + 1 cm^2 \\ \hline 501 cm^2 \end{array}
 \end{array}$$

$$\begin{array}{lll}
 d. \begin{array}{r} 8 km^2 \\ + 0.5 km^2 \\ \hline 8.5 km^2 \end{array} & 3-2. a. \begin{array}{r} 10 km^2 \\ - 6 km^2 \\ \hline 4 km^2 \end{array} & b. \begin{array}{r} 50 cm^2 = 50 cm^2 \\ - 100 mm^2 = - 1 cm^2 \\ \hline 49 cm^2 \end{array}
 \end{array}$$

$$\begin{array}{ll}
 2. \begin{array}{r} 1.5 cm^2 = 150 mm^2 \\ - 100 mm^2 = - 100 mm^2 \\ \hline 50 mm^2 \end{array} & d. \begin{array}{r} 6 km^2 = 6000000 m^2 \\ - 1000000 m^2 = - 1000000 m^2 \\ \hline 5000000 m^2 \end{array}
 \end{array}$$

$$\begin{array}{lll}
 3-3. a. \begin{array}{r} 6 km^2 \\ \times 10 \\ \hline 60 km^2 \end{array} & b. \begin{array}{r} 35 ha \\ \times 2 \\ \hline 70 ha \end{array} & c. \begin{array}{r} 1.5 mm^2 \\ \times 3 \\ \hline 4.5 mm^2 \end{array}
 \end{array}$$

Unit 2, Section 5-6
Exercises 3-4 (for section 5),
and Exercise 1 (for section 6).

28

Exercise 3-3

d.
$$\begin{array}{r} 20 \text{ m}^2 \\ \times 10 \\ \hline 200 \text{ m}^2 \end{array}$$

4-1. a.
$$\begin{array}{r} 10 \text{ m}^2 \\ 8 \overline{) 80 \text{ m}^2} \\ \hline \end{array}$$

b.
$$\begin{array}{r} 0.25 \text{ m}^2 \\ 3 \overline{) 0.75 \text{ m}^2} \\ \hline \end{array}$$

c.
$$\begin{array}{r} 5000 \text{ m}^2 \\ 3 \overline{) 15000 \text{ m}^2} \\ \hline \end{array}$$

d.
$$\begin{array}{r} 400 \text{ m}^2 \\ 5 \overline{) 2000 \text{ m}^2} \\ \hline \end{array}$$

4-1.
$$\begin{array}{r} 5 \text{ ha} \\ 15 \text{ ha} \\ 112 \text{ ha} \\ + 1207 \text{ ha} \\ \hline 1339 \text{ ha} \end{array}$$

4-2.
$$\begin{array}{r} 22 \text{ m}^2 \\ 15 \text{ m}^2 \\ 22 \text{ m}^2 \\ + 12 \text{ m}^2 \\ \hline 70 \text{ m}^2 \end{array}$$

4-3.
$$\begin{array}{r} 150 \text{ cm} \\ \times 100 \text{ cm} \\ \hline 15000 \text{ cm}^2 \\ \text{or } 1.5 \text{ m}^2 \end{array}$$

4-4.
$$\begin{array}{r} 20 \text{ m} \\ \times 40 \text{ m} \\ \hline 800 \text{ m}^2 \end{array}$$

a.
$$\begin{array}{r} 800 \text{ m}^2 \\ - 100 \text{ m}^2 \\ \hline 700 \text{ m}^2 \end{array}$$

b.
$$\begin{array}{r} 2 \\ 350 \text{ m}^2 \overline{) 700 \text{ m}^2} \\ \hline \end{array}$$

4-5. a.
$$\begin{array}{r} 300 \text{ cm} \\ \times 300 \text{ cm} \\ \hline 90000 \text{ cm}^2 \end{array}$$

b.
$$\begin{array}{r} 100 \\ 900 \text{ cm} \overline{) 90000 \text{ cm}} \\ \hline \end{array}$$

4-6.
$$\begin{array}{r} 12000 \text{ km}^2 \\ + 6000 \text{ km}^2 \\ \hline 18000 \text{ km}^2 \end{array}$$

$$\begin{array}{r} 18000 \text{ km} \\ - 8000 \text{ km} \\ \hline 10000 \text{ km} \end{array}$$

Only 10 000 km of timberland was left.

Section 6.

- 1-1. Liter; L. 1-2. 1.06 quarts.
1-3. The six prefixes used are milli, centi, deci, deka, hecto, and kilo. 1-4. Milliliter and liter.
1-5. 0.1 liter. 1-6. There are 1 000 liters in a kiloliter. 1-7. Prefixes used in liter are same as meter.

Section 6.
Exercises 2-3.

Unit 2.

29

2-1. a. $1L = 10dL$
 b. $1L = 100cL$
 c. $1L = 1000mL$
 d. $1L = .1daL$
 e. $1L = .001kL$

2-2. a. $1dL = .1L$
 b. $1cL = .01L$
 c. $1mL = .001L$
 d. $1hL = 100L$
 e. $1kL = 1000L$

2-3. a. $1000mL = 1L$
 b. $1000L = 1kL$
 c. $10dL = 1L$
 d. $500mL = .5L$
 e. $250L = .25kL$

3-1. a. $\begin{array}{r} 500mL \\ 40mL \\ 325mL \\ + 5mL \\ \hline 870mL \end{array}$

b. $\begin{array}{r} 40.25L \\ 3.75L \\ + 88.35L \\ \hline 132.35L \end{array}$

c. $\begin{array}{r} .50L \\ .25L \\ + .75L \\ \hline 1.50L \end{array}$

d. $\begin{array}{r} 9L = 9.000L \\ 28L = 28.000L \\ + 125mL = + .125L \\ \hline 37.125L \end{array}$

3-2. a. $\begin{array}{r} 496L \\ - 342L \\ \hline 154L \end{array}$

b. $\begin{array}{r} 72.25L \\ - 36.75L \\ \hline 35.50L \end{array}$

c. $\begin{array}{r} 68.75L \\ - 42.50L \\ \hline 26.25L \end{array}$

d. $\begin{array}{r} 922mL \\ - 300L = - 300mL \\ \hline 622mL \end{array}$

3-3. a. $\begin{array}{r} 325L \\ \times 20 \\ \hline 6500L \end{array}$

b. $\begin{array}{r} 3.5kL \\ \times 8 \\ \hline 28.0kL \end{array}$

c. $\begin{array}{r} 60L \\ \times 1.5 \\ \hline 90.0L \end{array}$

d. $\begin{array}{r} 246mL \\ \times 0.5 \\ \hline 123mL \end{array}$

3-4. a. $\begin{array}{r} 9L \\ 4 \overline{) 36L} \end{array}$

b. $\begin{array}{r} 185.7kL \\ 5 \overline{) 928.5kL} \end{array}$

Unit 2.

Section 6.
Exercises 3-5.

30

Exercises
3-7 (continued)

c.
$$\begin{array}{r} 207 \text{ mL} \\ 8 \overline{) 1656 \text{ mL}} \end{array}$$

d.
$$\begin{array}{r} 120 \text{ L} \\ 6 \overline{) 720 \text{ L}} \end{array}$$

4-1.
$$\begin{array}{r} 40.5 \text{ L} \\ 26.0 \text{ L} \\ 18.0 \text{ L} \end{array}$$

4-2.
$$\begin{array}{r} 75 \phi \\ - 69 \phi \\ \hline 6 \phi \end{array}$$

4-3.
$$\begin{array}{r} 2000 \text{ L} \\ + 18000 \text{ L} \\ \hline 20000 \text{ L} \\ - 1500 \text{ L} \\ \hline 18500 \text{ L} \end{array}$$

$$\begin{array}{r} 34.5 \text{ L} \\ + 7.5 \text{ L} \\ \hline 126.5 \text{ L} \end{array}$$

Pandy Jones used 18500
liters of heating oil.

4-4.
$$20 \text{ L} \overline{) 1 \text{ KL}} = 20 \text{ L} \overline{) 1000 \text{ L}}$$

4-5.
$$\begin{array}{r} \$2.50 \\ \times .5 \\ \hline \$1.250 \\ \text{or } \$1.25 \end{array}$$

4-6.
$$\begin{array}{r} 6 \\ 150 \text{ L} \overline{) 900 \text{ km}} \end{array}$$

Sanct Bell's average gas
consumption is 6 kilome-
ters per liter.

4-7. a.
$$\begin{array}{r} 500 \text{ mL} \\ \times 6 \\ \hline 3000 \text{ mL} \end{array}$$

b.
$$\begin{array}{r} .5 \text{ L} \\ \times 6 \\ \hline 3 \text{ L} \end{array}$$

c.
$$\begin{array}{r} \$1.50 \\ 3 \overline{) \$1.50} \end{array}$$

4-8.
$$\begin{array}{r} 100 \\ \times 1.06 \\ \hline 106.00 \text{ or } 106 \text{ quarts} \end{array}$$

4-9.
$$\begin{array}{r} 200. \\ 1.06 \overline{) 212.00} \end{array}$$

5-1. Gram; g. 5-2. Ounce (1 gram is equiv-
alent to 0.04 ounce). 5-3. The prefixes used are
milli, centi, deci, deka, hecto, and kilo. 5-4. The
most commonly used measures in the weight system
are the gram, kilogram, and metric ton.

Section 6.

Exercises 5-7.

Unit 2

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5-5. .001 gram is part of a milligram. 5-6. g.

5-7. There are 1000 grams in a kilogram.

5-8. There are 1000 kilograms in a metric ton.

- 6-1. a. $1\text{ kg} = 1000\text{ g}$
 b. $1\text{ g} = .001\text{ kg}$
 c. $1\text{ g} = 1000\text{ mg}$
 d. $1\text{ mg} = .001\text{ g}$
 e. $1\text{ t} = 1000\text{ kg}$
 f. $1\text{ kg} = .001\text{ t}$

- 6-2. a. $1\text{ kg} = 1000000\text{ mg}$
 b. $500\text{ mg} = .5\text{ g}$
 c. $250\text{ g} = .25\text{ kg}$
 d. $750\text{ g} = .75\text{ kg}$
 e. $0.25\text{ kg} = 250\text{ g}$
 f. $0.5\text{ kg} = 500\text{ g}$

- 6-3. a. $0.5\text{ kg} + 0.5\text{ kg} = 1\text{ kg}$ b. $25\text{ kg} + 25\text{ kg} = 50\text{ kg}$
 c. $0.75\text{ g} + 0.25\text{ g} = 1\text{ g}$ d. $0.3\text{ kg} + 0.4\text{ kg} = 0.7\text{ kg}$
 e. $0.25\text{ g} - 0.15\text{ g} = 0.1\text{ g}$ f. $0.5\text{ g} \times 3 = 1.5\text{ g}$

7-1.
$$\begin{array}{r} 2\text{ kg} \\ 15\text{ kg} \\ 120\text{ kg} \\ 48\text{ kg} \\ + 33\text{ kg} \\ \hline 218\text{ kg} \end{array}$$

7-2.
$$\begin{array}{r} 226.80\text{ g} \\ 113.40\text{ g} \\ 113.40\text{ g} \\ 28.35\text{ g} \\ 81.59\text{ g} \\ + 35.44\text{ g} \\ \hline 598.98\text{ g} \end{array}$$

7-3.
$$\begin{array}{r} 200\text{ g} = 0.2\text{ kg} \\ 1.5\text{ kg} = 1.5\text{ kg} \\ 0.5\text{ kg} = 0.5\text{ kg} \\ + 2.5\text{ kg} = 2.5\text{ kg} \\ \hline 4.7\text{ kg} \end{array}$$

7-4. a.
$$\begin{array}{r} \$4.00 \\ \times 1.5 \\ \hline \$6.00 \end{array}$$

b.
$$\begin{array}{r} 6.00 \\ \times 0.25 \\ \hline \$1.50 \end{array}$$

7-5. a.
$$\begin{array}{r} \$4.00 \\ \times 4 \\ \hline \$16.00 \end{array}$$

b.
$$\begin{array}{r} \$2.00 \\ 8 \overline{) \$16.00} \end{array}$$

Unit 2. Section 6,
Exercise 7,
Review Assignment 6 (Exercises 1-5).

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$$\begin{array}{r} 7-6. \quad \$ 2 \\ \times 25 \\ \hline \$ 50 \end{array}$$

$$\begin{array}{r} 7-7. \quad \quad \quad 50 \text{ kg} \\ 2.2 \text{ lb} \overline{) 110.0 \text{ lb}} \end{array}$$

$$\begin{array}{r} 7-8. \quad "15 \text{ k} \\ \times 2.2 \text{ lb} \\ \hline 33 \text{ lb} \end{array}$$

$$\begin{array}{r} 7-9. \quad \quad \quad 400 \text{ t} \\ 1.1 \text{ t} \overline{) 440.0 \text{ t}} \end{array}$$

Review Assignment 6

1. area: (d) Length times width.
gram: (f) 0.001 kilogram.
hectare: (c) Common name for square hectometer.
kilogram: (a) Basic metric measure of weight.
liter: (e) Basic metric measure of capacity.
metric ton: (b) 1 000 kilograms.
square meter: (g) Basic metric unit of area.

$$\begin{array}{r} 2. \quad a. \quad \begin{array}{r} 5.0 \text{ m} \\ 3.7 \text{ m} \\ 3.2 \text{ m} \\ 2.0 \text{ m} \\ 1.5 \text{ m} \\ + 0.6 \text{ m} \\ \hline 16.0 \text{ m} \end{array} \end{array}$$

$$\begin{array}{r} b. \quad \$ 2.00 \\ \times 16 \\ \hline \$ 32.00 \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{r} 8.00 \text{ m} \\ 6.70 \text{ m} \\ + 5.45 \text{ m} \\ \hline 20.15 \text{ m} \\ \begin{array}{r} 20.00 \text{ m} \\ - 20.15 \text{ m} \\ \hline 9.85 \text{ m} \end{array} \end{array} \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 12 \text{ m} \\ \times 6.5 \text{ m} \\ \hline 60 \\ 72 \\ \hline 78.0 \text{ m} \end{array} \end{array}$$

$$\begin{array}{r} 5. \quad \begin{array}{r} 6 \text{ L} \\ 30 \text{ L} \\ 45 \text{ L} \\ + 60 \text{ L} \\ \hline 141 \text{ L} \end{array} \end{array}$$

$$\begin{array}{r} \begin{array}{r} 141 \text{ L} \\ - 8 \text{ L} \\ \hline 133 \text{ L} \end{array} \end{array}$$

Section 6,
Review Assignment 6
(Exercises 6-11).

6.
$$\begin{array}{r} 500\text{ g} \\ \times 24 \\ \hline 2000 \\ 1000 \\ \hline 12\,000\text{ g} = 12\text{ kg} \end{array}$$

7.
$$\begin{array}{r} \$.001 \\ 1000 \overline{) \$ 1.000} \end{array}$$

8.
$$\begin{array}{l} \$ 3.00 \times 2.0\text{ kg} = \$ 6.00 \\ 2.00 \times 1.5\text{ kg} = 3.00 \\ 4.00 \times 3.5\text{ kg} = 14.00 \\ 4.00 \times 2.5\text{ kg} = 10.00 \\ \hline 9.5\text{ kg} \quad \$ 33.00 \\ \text{(a.)} \quad \text{(b.)} \end{array}$$

9.
$$\begin{array}{r} \$ 80.00 \\ + 351.70 \\ \hline \$ 431.70 \\ - 25.95 \\ \hline \$ 405.85 \end{array}$$

10. (See problem below.)

11.
$$\begin{array}{r} 1\,111 \\ \$ 5,364.80 \\ + 16,835.25 \\ \hline \$ 23,200.05 \\ - 6,746.84 \\ \hline a. \$ 16,453.21 \end{array}$$

$$\begin{array}{r} \$ 19,316.25 \\ - 16,453.21 \\ \hline \$ 2,863.04 \end{array}$$

Helen had too lit-
tle cash by 25¢.

Barry Nye Reconciliation Statement October 1, 1980.			
checkbook balance:	\$ 312.80	Bank statement balance:	\$ 398.46
Less:		Less outstanding checks:	
Service charge	2.00	#345	\$ 69.75
		#346	17.91
			<u>87.66</u>
correct checkbook balance:	\$ 310.80	available bank balance:	\$ 310.80

Unit 3.

Section 7.

Part 7a.

Exercises 1-2.

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Unit 3 Section 7.

Even
Ans

- 1-1. a. 2 doz. eggs @ 15¢ = \$1.90
 b. 2 kg apples @ 75¢ = \$1.50
 c. 2 pkts. coffee @ 71¢ = \$1.42
 d. 3 cans peas @ 51¢ = \$1.53
 e. 3 melons @ 43¢ = \$1.29
 f. 2 bch. carrots @ 35¢ = \$1.10
 g. 3 jars mustard @ 40¢ = \$1.20
 h. 4 liters milk @ 51¢ = \$2.04

- 1-2. a. 6 pkts. macaroni @ 24.45¢ = \$1.47
 b. 8 cans. beans @ 29.61¢ = \$2.37
 c. 3 lbs. pork @ 66.67¢ = \$2.00
 d. 3 lbs. beef @ 51¢ = \$1.53
 e. 8 lbs. corn @ 49.61¢ = \$3.97
 f. 4 lbs. butter @ 42.12¢ = \$1.68
 g. 4 lbs. cheese @ 35.36¢ = \$1.41

2-1.

Kitchen Mart			
Sold to: Alex White			
Qty	Description	Unit Price	Total
3 lb.	Meat	\$2.30	\$6.90
5 lb.	Oranges	.35	1.75
2 lb.	Cheese	.91	1.82
5 lb.	Onions	.45	2.25
8 ears	Corn	.99	7.92
2 lb.	Butter	.95	1.90
Total Lab.			\$22.54

2-2.

Clothing Mart			
Sold to: Lee White			
Qty	Description	Unit Price	Total
4 m	Cotton	\$1.03	\$4.12
2 m	Corduroy	2.47	4.94
3 m	Velvet	4.75	14.25
3 m	Satin	—	1.80
4	Zipper	.63	2.52
5 sp.	Thread	.41	2.05
Total Lab.			\$29.68

Section 7.

Unit 3

Part 7a - Review Assignment 7a.

Exercises 2-3 (for Part 7a), and

Exercises 1-3 (for Review Assignment 7a).

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3. Shopping Basket

Sold to: Ron Jensen

Qty	Description	Unit Price	Amount
2 kg	Sausage	\$1.74	\$3.48
6	Shrimp	2 for \$1.00	2.10
2 heads	Lettuce	1.25	2.50
12 bars	Loops	4 for \$5.94	1.77
Total Sale			\$9.85

2-4. Tom's Hardware

Sold to: Joan Niles

Qty	Description	Unit Price	Amount
5 kg	Nails	\$2.50	\$12.50
2 boxes	Screws	3.10	6.20
4 L	Paint	2.25	9.00
3 boxes	Fuses	.51	1.53
4	Brushes	—	1.99
8	Bulbs	4 for \$1.50	3.00
Total Sale			\$34.22

	Amount Received	Amount of Sale	Change						
			1¢	5¢	10¢	25¢	50¢	\$1	\$5
1.	\$10.00	\$5.26	4		2		1	4	
2.	1.00	.28	2		2		1		
3.	1.00	.59	1	1	1	1			
4.	5.00	2.17	3	1		1	1	2	
5.	10.00	3.49	1				1	1	1
6.	1.00	.36	4		1		1		
7.	5.00	1.66	4	1		1		3	
8.	10.00	3.22	3			1	1	1	1
9.	1.00	.49	1				1		
10.	5.00	4.26	4		2		1		

extension: (b) The total price of each quantity.

sales slip: (c) A form showing details of a sale.

unit price: (a) The price of a single item.

1. a. $28 + 12 = 40$ b. $9 = 0 + 9$ c. $24 - 4 = 20$

d. $7 \times 8 = 56$ e. $12 = 12 - 0$ f. $36 \div 9 = 4$

2. $72,002 - 34,769 = 37,233$

Unit 3:

Section 7.

Review Assignment 7a - Part 7b.

Exercises 4-8 (for Review Assignment 7b)
and Exercise 4 (for Part 7b).

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Review Assignment 7a (continued)

4.

Pedro Cabro Reconciliation Statement May 31, 1981

Checkbook balance: \$864.98

Less:

Service charge 2.65

Correct checkbook balance: \$862.33

Bank statement balance: \$921.

Less outstanding checks:

#236 \$ 35.06

#240 6.34

#245 17.98 59.

Available bank balance: \$862

$$\begin{array}{r}
 5. \quad \$ 50.00 \\
 + 329.48 \\
 \hline
 379.48 \\
 - 18.56 \\
 \hline
 \$ 360.92
 \end{array}$$

$$\begin{array}{r}
 \$ 361.27 \\
 - 360.92 \\
 \hline
 \$.25 \\
 \text{Stella was short} \\
 \text{by 25¢}
 \end{array}$$

$$\begin{array}{r}
 6. \quad 98 \times \$.01 = 98 \\
 21 \times .05 = 1.10 \\
 41 \times .10 = 4.10 \\
 16 \times .25 = 4.00 \\
 27 \times .50 = 13.50 \\
 9 \times 1.00 = 9.00 \\
 7 \times 5.00 = 35.00 \\
 4 \times 10.00 = 40.00 \\
 1 \times 20.00 = 20.00 \\
 \hline
 35.00 \\
 38.00 \\
 + 51.00 \\
 \hline
 \$ 253.00
 \end{array}$$

$$\begin{array}{r}
 7. \quad 6.35 \text{ m} \\
 5.45 \text{ m} \\
 + 3.25 \text{ m} \\
 \hline
 15.05 \text{ m}
 \end{array}$$

$$\begin{array}{r}
 8. \quad 2.40 \text{ m} \\
 1.75 \text{ m} \\
 + 0.80 \text{ m} \\
 \hline
 4.95 \text{ m}
 \end{array}$$

Part 7b.

$$\begin{array}{l}
 4-1. \quad 2 \times 1 = 2 \\
 \quad \quad 2 \times 2 = 4 \\
 \quad \quad 2 \times 3 = 6 \\
 \quad \quad 2 \times 4 = 8 \\
 \quad \quad 2 \times 5 = 10 \\
 \quad \quad 2 \times 6 = 12 \\
 \quad \quad 2 \times 7 = 14 \\
 \quad \quad 2 \times 8 = 16 \\
 \quad \quad 2 \times 9 = 18 \\
 \quad \quad 2 \times 0 = 0
 \end{array}$$

$$\begin{array}{l}
 4-2. \quad 3 \times 1 = 3 \\
 \quad \quad 3 \times 2 = 6 \\
 \quad \quad 3 \times 3 = 9 \\
 \quad \quad 3 \times 4 = 12 \\
 \quad \quad 3 \times 5 = 15 \\
 \quad \quad 3 \times 6 = 18 \\
 \quad \quad 3 \times 7 = 21 \\
 \quad \quad 3 \times 8 = 24 \\
 \quad \quad 3 \times 9 = 27 \\
 \quad \quad 3 \times 0 = 0
 \end{array}$$

Section 7.
Part 7b.
Exercises 4-5.

Unit 3.

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4-3. $4 \times 1 = 4$

$4 \times 2 = 8$

$4 \times 3 = 12$

$4 \times 4 = 16$

$4 \times 5 = 20$

$4 \times 6 = 24$

$4 \times 7 = 28$

$4 \times 8 = 32$

$4 \times 9 = 36$

$4 \times 0 = 0$

4-4. $5 \times 1 = 5$

$5 \times 2 = 10$

$5 \times 3 = 15$

$5 \times 4 = 20$

$5 \times 5 = 25$

$5 \times 6 = 30$

$5 \times 7 = 35$

$5 \times 8 = 40$

$5 \times 9 = 45$

$5 \times 0 = 0$

4-5. $6 \times 1 = 6$

$6 \times 2 = 12$

$6 \times 3 = 18$

$6 \times 4 = 24$

$6 \times 5 = 30$

$6 \times 6 = 36$

$6 \times 7 = 42$

$6 \times 8 = 48$

$6 \times 9 = 54$

$6 \times 0 = 0$

4-6. $7 \times 1 = 7$

$7 \times 2 = 14$

$7 \times 3 = 21$

$7 \times 4 = 28$

$7 \times 5 = 35$

$7 \times 6 = 42$

$7 \times 7 = 49$

$7 \times 8 = 56$

$7 \times 9 = 63$

$7 \times 0 = 0$

4-7. $8 \times 1 = 8$

$8 \times 2 = 16$

$8 \times 3 = 24$

$8 \times 4 = 32$

$8 \times 5 = 40$

$8 \times 6 = 48$

$8 \times 7 = 56$

$8 \times 8 = 64$

$8 \times 9 = 72$

$8 \times 0 = 0$

4-8. $9 \times 1 = 9$

$9 \times 2 = 18$

$9 \times 3 = 27$

$9 \times 4 = 36$

$9 \times 5 = 45$

$9 \times 6 = 54$

$9 \times 7 = 63$

$9 \times 8 = 72$

$9 \times 9 = 81$

$9 \times 0 = 0$

4-9. $12 \times 1 = 12$

$12 \times 2 = 24$

$12 \times 3 = 36$

$12 \times 4 = 48$

$12 \times 5 = 60$

$12 \times 6 = 72$

$12 \times 7 = 84$

$12 \times 8 = 96$

$12 \times 9 = 108$

5-1. $3 \times 5 = 5 \times 3$

5-2. $17 \times 4 = 4 \times 17$

5-3. $7 \times 5 = 5 \times 7$

5-4. $5 \times 9 = 5 \times 9$

5-5. $62 = 1 \times 62$

5-6. $1 \times 1 = 1$

5-7. $0 = 0 \times 54$

5-8. $1 \times 67 = 67$

5-9. $40 = 5 \times 8$

5-10. $27 \times 0 = 0$

5-11. $1 \times 1 = 1$

5-12. $35 \times 0 = 0$

Unit 3.

Section 7.

Part 7b - Review Assignment 7b.

Exercise 6 (for Part 7b),

and Exercises 1-4 (for Review Assignment 7b).

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$$\begin{array}{r}
 6-1. \quad a. \quad \begin{array}{r} 32 \\ \times 26 \\ \hline 192 \\ 64 \\ \hline 832 \end{array} \quad b. \quad \begin{array}{r} 59 \\ \times 26 \\ \hline 354 \\ 118 \\ \hline 1534 \end{array} \quad 6-2. \quad a. \quad \begin{array}{r} 43 \\ \times 25 \\ \hline 215 \\ 86 \\ \hline 1075 \end{array} \quad b. \quad \begin{array}{r} 57 \\ \times 24 \\ \hline 228 \\ 114 \\ \hline 1368 \end{array} \quad 6-3. \quad a. \quad \begin{array}{r} 37 \\ \times 38 \\ \hline 296 \\ 111 \\ \hline 1406 \end{array}
 \end{array}$$

$$\begin{array}{r}
 b. \quad \begin{array}{r} 39 \\ \times 68 \\ \hline 312 \\ 234 \\ \hline 2652 \end{array} \quad 6-4. \quad a. \quad \begin{array}{r} 432 \\ \times 214 \\ \hline 1728 \\ 432 \\ 864 \\ \hline 92448 \end{array} \quad b. \quad \begin{array}{r} 264 \\ \times 531 \\ \hline 264 \\ 792 \\ 1320 \\ \hline 140184 \end{array} \quad 6-5. \quad a. \quad \begin{array}{r} 864 \\ \times 357 \\ \hline 6048 \\ 4320 \\ 2592 \\ \hline 308448 \end{array} \quad b. \quad \begin{array}{r} 579 \\ \times 246 \\ \hline 3474 \\ 2316 \\ 1158 \\ \hline 142434 \end{array}
 \end{array}$$

Review
Assignment 7b

1. factors: (d) The two numbers in multiplication,
 multiplicand: (a) A number that is multiplied.
 multiplication: (e) A way of adding two or more equal numbers.
 multiplier: (b) A number by which another is multiplied.
 product: (c) The result of multiplication.

$$\begin{array}{lll}
 2. \quad a. \quad 0 = 0 \times 7 & b. \quad 12 \times 0 = 0 & c. \quad 9 = 1 \times 9 \\
 d. \quad 16 \times 1 = 16 & e. \quad 15 - 8 = 7 & f. \quad 6 \times 12 = 72
 \end{array}$$

$$\begin{array}{r}
 3. \quad \begin{array}{r} 28m \\ \times 25 \\ \hline 140 \\ 56 \\ \hline 700m \end{array} \quad 4. \quad \begin{array}{r} \$16,850 \\ + 4,866 \\ \hline \$21,716 \end{array} \quad \begin{array}{r} \$21,716 \\ - 18,232 \\ \hline \$3,484 \end{array}
 \end{array}$$

The cost of the goods sold in June was \$3,484.

Section 7.

Review Assignment 7b - Part 7c,
Exercises 5-7 (for Review Assignment 7b),
and Exercise 7 (for Part 7c).

$$\begin{array}{r} 5. \quad \$2.35 \\ \times 315 \\ \hline 1175 \\ 235 \\ 705 \\ \hline \$740.25 \end{array}$$

$$\begin{array}{r} \$75.00 \\ +740.25 \\ \hline \$815.25 \end{array}$$

$$\begin{array}{r} 6. \quad \$3.85 \\ \times 8 \\ \hline \$30.80 \end{array}$$

$$\begin{array}{r} 2 \quad 24 \\ \times 8 \\ \hline 192 \end{array}$$

$$\begin{array}{r} 235 \\ 705 \\ \hline \$740.25 \end{array}$$

$$\begin{array}{r} 192 \\ \times .20 \\ \hline \$38.40 \end{array}$$

$$\begin{array}{r} \$38.40 \\ -30.80 \\ \hline \$7.60 \end{array}$$

The gross profit for
the apples was \$7.60.

$$\begin{array}{r} 7. \quad \$829.45 \\ -76.93 \\ \hline 552.52 \\ +75.00 \\ \hline \$627.52 \end{array}$$

- 7-1. a. \$6.15; \$9.56; \$23.30; \$51.00
b. \$.076; \$.078; \$.209
c. 9.7; 6.4; 9.0
d. 2.42; 0.40; 0.01
e. 4.6¢; 3.0¢; 20.0¢; 20.9¢

- 7-2. a. 44,000,000; 43,600,000; 43,580,000; 43,575,000
b. 4,000,000; 3,700,000; 3,730,000; 3,733,000
c. 17,000,000; 17,000,000; 17,030,000; 17,029,000
d. 28,000,000; 28,100,000; 28,080,000; 28,084,000
e. 5,000,000; 5,300,000; 5,300,000; 5,295,000
f. 10,000,000; 9,500,000; 9,550,000; 9,550,000

- 7-3. a. 550 b. 4,700 c. 7,880 d. 920
e. 1.89 f. 200 g. 6.07 h. 53.9
i. 0.04 j. 0.006 k. 0.045 l. 0.024
m. \$20.00 n. \$35.50 o. \$78.00 p. \$42.00
q. \$849.60 r. \$751.20 s. \$349.00 t. \$172.40

Unit 3.

Section 7.

Part 7c

Exercises 8-9.

40

8-1. $5 \times \$10 = \50

8-2. $10 \times \$15 = \150

8-3. $90 \times \$300 = \$27,000$

8-4. $9 \times \$30 = \270

8-5. $30 \times 7 = 210$

8-6. $22 \times 100 = 2,200$

8-7. $1,400 \times 600 = 840,000$

8-8. $70 \times 20 = 1,400$

$$\begin{array}{r} 9-1. \quad a. \quad \$400 \\ \times \quad 4 \\ \hline 1600 \end{array}$$

$$\begin{array}{r} ^{32} ^{32} ^{32} \\ 3,881 \\ \times 438 \\ \hline 31048 \\ 11643 \\ 15524 \\ \hline 1699,878 \end{array}$$

$$\begin{array}{r} ^{13} ^{28} \\ 438 \\ \times 3,881 \\ \hline 438 \\ 3504 \\ 3504 \\ 1314 \\ \hline 169,9878 \end{array}$$

$$\begin{array}{r} b. \quad \$600.00 \\ \times \quad 30 \\ \hline \$18,000.00 \end{array}$$

$$\begin{array}{r} ^{14} ^{16} ^{18} \\ \$650.76 \\ \times \quad 29 \\ \hline 585684 \\ 130152 \\ \hline \$18,872.04 \end{array}$$

$$\begin{array}{r} ^{54} ^{82} \\ 29 \\ \times \$650.76 \\ \hline 174 \\ 203 \\ 145 \\ 174 \\ \hline \$18,872.04 \end{array}$$

$$\begin{array}{r} c. \quad \$16.00 \\ \times \quad 35 \\ \hline 8000 \\ 4800 \\ \hline \$560.00 \end{array}$$

$$\begin{array}{r} ^{12} ^{12} ^{12} ^{12} \\ \$16.55 \\ \times 34.8 \\ \hline 13240 \\ 6620 \\ 4965 \\ \hline \$575,940 \end{array}$$

$$\begin{array}{r} ^{22} ^{44} \\ 34.8 \\ \times 16.55 \\ \hline 1740 \\ 1740 \\ 2088 \\ 348 \\ \hline \$575,940 \end{array}$$

Section 7.
Part 7c.
Exercise 9.

Unit 3.

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d. 736. ^{3 5 1}736.2 ^{6 6}99.9

$$\begin{array}{r} \times 100 \\ \hline 73,600. \end{array}$$
$$\begin{array}{r} \times 99.9 \\ \hline 66258 \\ 66258 \\ \hline 73546.38 \end{array}$$
$$\begin{array}{r} \times 736.2 \\ \hline 1221998 \\ 5994 \\ 2997 \\ \hline 6993 \\ \hline 73546.38 \end{array}$$

7-2. a. 1,300 ¹1,305 ^{2 1}423

$$\begin{array}{r} \times 420 \\ \hline 26000 \\ 5200 \\ \hline 546,000 \end{array}$$
$$\begin{array}{r} \times 423 \\ \hline 3915 \\ 2610 \\ \hline 5220 \\ \hline 552015 \end{array}$$
$$\begin{array}{r} \times 1,305 \\ \hline 2115 \\ 1269 \\ 423 \\ \hline 552,015 \end{array}$$

b. \$500.00 ⁴\$505.79 ^{2 3 4}75

$$\begin{array}{r} \times 80 \\ \hline \$40,000.00 \end{array}$$
$$\begin{array}{r} \times 75 \\ \hline 252895 \\ 354053 \\ \hline \$37,934.25 \end{array}$$
$$\begin{array}{r} \times \$505.79 \\ \hline 1675 \\ 525 \\ 375 \\ \hline \$37,934.25 \end{array}$$

c. \$100.00 ^{2 4 2 2 2}\$97.35 ^{5 1 2 2}46.55

$$\begin{array}{r} \times 47.00 \\ \hline \$4700.0000 \\ = \$4,700.00 \end{array}$$
$$\begin{array}{r} \times 46.55 \\ \hline 48675 \\ 58410 \\ 38940 \\ \hline \$4531.6425 \\ = \$4,531.64 \end{array}$$
$$\begin{array}{r} \times 46.55 \\ \hline 23275 \\ 13965 \\ 32585 \\ 41895 \\ \hline \$4531.6425 \\ = \$4,531.64 \end{array}$$

Unit 3, Section 7.

Part 7c - Review Assignment 7c.

Exercise 9 (for Part 7c),

and Exercises 1-3 (for Review Assignment 7c).

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Exercise 9-2
(continued)

$$\begin{array}{r}
 d. \quad \begin{array}{r} 450 \\ \times 50 \\ \hline 22500 \end{array} \quad \begin{array}{r} 453.6 \\ \times 48.08 \\ \hline 36288 \\ 18144 \\ \hline 21809.088 \end{array} \quad \begin{array}{r} 48.08 \\ \times 453.6 \\ \hline 28848 \\ 14424 \\ 24040 \\ \hline 19232 \\ \hline 21809.088 \end{array}
 \end{array}$$

Review Assignment 7c

$$\begin{array}{lll}
 1. \quad a. \quad 8 + 13 = 21 & b. \quad 27 - 7 = 20 & c. \quad 4 \times 13 = 56 \\
 d. \quad 36 \div 3 = 12 & e. \quad 15 \times 1 = 15 & f. \quad 18 \times 0 = 0
 \end{array}$$

$$\begin{array}{r}
 2. \quad a. \quad \begin{array}{r} 81,038 \\ - 64,479 \\ \hline 16,559 \end{array} \quad b. \quad \begin{array}{r} 3,604 \\ \times 13.02 \\ \hline 7208 \\ 10812 \\ 3604 \\ \hline 46924.08 \end{array} \quad c. \quad \begin{array}{r} 9.50m \\ - 4.25m \\ \hline 5.25m \end{array}
 \end{array}$$

3. <div>Julian Sinclair Reconciliation Statement July 1, 1980</div>	
Checkbook balance: \$452.11	Bank statement balance: \$491.22
Less:	Less outstanding checks:
Service charge 1.84	#81 \$31.18
	#87 9.77
	<u>40.95</u>
Correct checkbook balance: \$450.27	Available bank balance: \$450.27

Sections 7-8.

Review Assignment 7c. - Page 8a.

Exercises 4-8, (for Review Assignment 7c.)

and Exercise 10.

$$\begin{array}{r}
 \$100.00 \\
 + 742.18 \\
 \hline
 842.18 \\
 - 27.59 \\
 \hline
 \$814.59
 \end{array}$$

$$\begin{array}{r}
 \$814.59 \\
 - 814.22 \\
 \hline
 \$.37
 \end{array}$$

Cash was short
by 37¢.

$$\begin{array}{r}
 5. \quad 250 \\
 \times .75 \\
 \hline
 1250 \\
 1750 \\
 \hline
 \$187.50 \\
 + 25.00 \\
 \hline
 \$212.50
 \end{array}$$

(continued). $\begin{array}{r} 2 \\ \$.75 \end{array}$

$$\begin{array}{r}
 \times 33 \\
 \hline
 235 \\
 235 \\
 \hline
 \$25.85 \\
 + 188.25 \\
 \hline
 \$214.10
 \end{array}$$

$$\begin{array}{r}
 3 \text{ " } \\
 \$214.10 \\
 - 212.50 \\
 \hline
 \$ 1.60
 \end{array}$$

a. \$214.10.

b. Jane was over
by \$1.60.

$$\begin{array}{r}
 6 \\
 3 \overline{)18} \\
 \hline
 18 \\
 \hline
 0
 \end{array}$$

$$\begin{array}{r}
 5 \\
 \$.89 \\
 \times 6 \\
 \hline
 \$5.34
 \end{array}$$

$$\begin{array}{r}
 1 \\
 \$106,470 \\
 + 32,055 \\
 \hline
 138,525 \\
 - 108,600 \\
 \hline
 \$ 29,925
 \end{array}$$

a. \$29,925

$$\begin{array}{r}
 138,525 \\
 - 29,925 \\
 \hline
 \$108,600
 \end{array}$$

b. \$108,600

Ella Dorr

Reconciliation Statement

April 30, 1981

Checkbook balance: \$598.42

Less:

Service charge .95

Bank statement balance: \$432.29

Less outstanding check:

#212 84.82

Sub-total

347.47

Add: deposit not recorded

250.00

Correct checkbook balance: \$597.47

Available bank balance: \$597.47

Unit 3.

Section 8.

Parts 8a-8b.

Exercises 1-2 (for Part 8a),
and Exercise 3 (for Part 8b).

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Part 8a.

Section 8.

1-1, a. $\$22.00 \times .03 = \6.600 66¢
b. $\$8.00 \times .05 = \4.000 40¢
c. $\$15.00 \times .06 = \9.000 90¢
d. $\$31.00 \times .04 = \1.2400 \$1.24

1-2. a. Belt $\$9.00 \times .03 = \2.700 27¢
b. Shirt $\$75.00 \times .04 = \6.000 60¢
c. Shoes $\$25.00 \times .04 = \1.0000 \$1.00
d. Jacket $\$40.00 \times .07 = \2.8000 \$2.80

e. Typewriter $\$400.00 \times .03 = \12.0000 \$12.00
f. Furniture $\$250.00 \times .04 = \10.0000 \$10.00
g. Boots $\$22.00 \times .05 = \1.1000 \$1.10
h. Automobile $\$5,000 \times .06 = \300.00 \$300.00

2.	Amount of Sale	Sales Tax Rate	Sales Tax Amt.	Total Sale	Amount of Sale	Sales Tax Rate	Sales Tax Amt.	Total Sale	
1.	\$8.99	4%	36¢	\$9.35	6.	\$3.95	7%	28¢	\$4.23
2.	\$15.75	6%	95¢	\$16.70	7.	89¢	4%	4¢	93¢
3.	\$24.10	3%	72¢	\$24.82	8.	\$12.41	5%	62¢	\$13.03
4.	\$39.50	5%	\$1.98	\$41.48	9.	\$65.49	3%	\$1.96	\$67.45
5.	\$33.29	7%	\$2.33	\$35.62	10.	\$99.95	6%	\$6.00	\$105.95

Part 8b.

3-1. a. $0.435 \times 10 = 4.35$; b. $0.435 \times 100 = 43.5$; c. $0.435 \times 1,000 = 435$
3-2. a. $0.64 \times 10 = 6.4$; b. $0.64 \times 100 = 64$; c. $0.64 \times 1,000 = 640$
3-3. a. $3.5 \times 10 = 35$; b. $3.5 \times 100 = 350$; c. $3.5 \times 1,000 = 3,500$
3-4. a. $0.04 \times 10 = 0.4$; b. $0.04 \times 100 = 4$; c. $0.04 \times 1,000 = 40$
3-5. a. $14 \times 10 = 140$; b. $14 \times 100 = 1,400$; c. $14 \times 1,000 = 14,000$
3-6. a. $23 \times 10 = 230$; b. $23 \times 100 = 2,300$; c. $23 \times 1,000 = 23,000$
3-7. a. $18 \times 10 = 180$; b. $18 \times 100 = 1,800$; c. $18 \times 1,000 = 18,000$

Section 8.

Unit 3.

Part 8b.

Exercises 3-4.

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3-8. a. $20 \times 10 = 200$; b. $20 \times 100 = 2,000$; c. $20 \times 1,000 = 20,000$.

3-9. a. $\$2.49 \times 10 = \24.90 ; b. $\$2.49 \times 100 = \249.00 ; c. $\$2.49 \times 1,000 = \$2,490.00$.

3-10. a. $\$6.40 \times 10 = \64.00 ; b. $\$6.40 \times 100 = \640.00 ; c. $\$6.40 \times 1,000 = \$6,400.00$.

3-11. a. $\$.285 \times 10 = \2.85 ; b. $\$.285 \times 100 = \28.50 ; c. $\$.285 \times 1,000 = \285.00 .

3-12. a. $\$.375 \times 10 = \3.75 ; b. $\$.375 \times 100 = \37.50 ; c. $\$.375 \times 1,000 = \375.00 .

3-13. a. $\$.06 \times 10 = \$.60$; b. $\$.06 \times 100 = \6.00 ; c. $\$.06 \times 1,000 = \60.00 .

3-14. a. $\$.08 \times 10 = \$.80$; b. $\$.08 \times 100 = \8.00 ; c. $\$.08 \times 1,000 = \80.00 .

3-15. a. $\$.47 \times 10 = \4.70 ; b. $\$.47 \times 100 = \47.00 ; c. $\$.47 \times 1,000 = \470.00 .

3-16. a. $\$.73 \times 10 = \7.30 ; b. $\$.73 \times 100 = \73.00 ; c. $\$.73 \times 1,000 = \730.00 .

3-17. a. $25¢ \times 10 = \$2.50$; b. $25¢ \times 100 = \$25.00$; c. $25¢ \times 1,000 = \$250.00$.

3-18. a. $38¢ \times 10 = \$3.80$; b. $38¢ \times 100 = \$38.00$; c. $38¢ \times 1,000 = \$380.00$.

3-19. a. $3¢ \times 10 = 30¢$; b. $3¢ \times 100 = \$3.00$; c. $3¢ \times 1,000 = \$30.00$.

3-20. a. $9¢ \times 10 = 90¢$; b. $9¢ \times 100 = \$9.00$; c. $9¢ \times 1,000 = \$90.00$.

-1. a. $\$10 \times 0.235 = \2.35 ; b. $\$100 \times 0.235 = \23.50 ; c. $\$1,000 \times 0.235 = \235.00 .

-2. a. $\$10 \times 0.45 = \4.50 ; b. $\$100 \times 0.45 = \45.00 ; c. $\$1,000 \times 0.45 = \450.00 .

-3. a. $\$10 \times 0.075 = \$.75$; b. $\$100 \times 0.075 = \7.50 ; c. $\$1,000 \times 0.075 = \75.00 .

-4. a. $\$10 \times 0.05 = \$.50$; b. $\$100 \times 0.05 = \5.00 ; c. $\$1,000 \times 0.05 = \50.00 .

-5. a. $\$10 \times 4.36 = \43.60 ; b. $\$100 \times 4.36 = \436.00 ; c. $\$1,000 \times 4.36 = \$4,360.00$.

-6. a. $\$10 \times 7.3 = \73.00 ; b. $\$100 \times 7.3 = \730.00 ; c. $\$1,000 \times 7.3 = \$7,300.00$.

-7. a. $\$10 \times 15 = \150 ; b. $\$100 \times 15 = \$1,500$; c. $\$1,000 \times 15 = \$15,000$.

-8. a. $\$10 \times 35 = \350 ; b. $\$100 \times 35 = \$3,500$; c. $\$1,000 \times 35 = \$35,000$.

-9. a. $\$10 \times 0.06 = \$.60$; b. $\$100 \times 0.06 = \6.00 ; c. $\$1,000 \times 0.06 = \60.00 .

-10. a. $\$10 \times 2.45 = \24.50 ; b. $\$100 \times 2.45 = \245.00 ; c. $\$1,000 \times 2.45 = \$2,450.00$.

-11. a. $\$10 \times 0.75 = \7.50 ; b. $\$100 \times 0.75 = \75.00 ; c. $\$1,000 \times 0.75 = \750.00 .

-12. a. $\$10 \times 22.4 = \224.00 ; b. $\$100 \times 22.4 = \$2,240.00$; c. $\$1,000 \times 22.4 = \$22,400.00$.

-13. a. $\$10 \times 0.35 = \3.50 ; b. $\$100 \times 0.35 = \35.00 ; c. $\$1,000 \times 0.35 = \350.00 .

-14. a. $\$10 \times 15.5 = \155.00 ; b. $\$100 \times 15.5 = \$1,550.00$; c. $\$1,000 \times 15.5 = \$15,500.00$.

-15. a. $\$10 \times 0.035 = \$.35$; b. $\$100 \times 0.035 = \3.50 ; c. $\$1,000 \times 0.035 = \35.00 .

-16. a. $\$10 \times 0.085 = \$.85$; b. $\$100 \times 0.085 = \8.50 ; c. $\$1,000 \times 0.085 = \85.00 .

-17. a. $\$10 \times 17 = \170 ; b. $\$100 \times 17 = \$1,700$; c. $\$1,000 \times 17 = \$17,000$.

-18. a. $\$10 \times 3.8 = \38.00 ; b. $\$100 \times 3.8 = \380.00 ; c. $\$1,000 \times 3.8 = \$3,800.00$.

Unit 3. Section 8.

Part 8b - Review Assignment 8b.

Exercises 4-5 (for Part 8b),

and Exercises 1-4 (for Review Assignment 8b).

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Exercise 4
(continued).

4-19. a. $\$10 \times 0.05 = \0.50 ; b. $\$100 \times 0.05 = \5.00 ; c. $\$1,000 \times 0.05 = \50.00

4-20. a. $\$10 \times 1.46 = \14.60 ; b. $\$100 \times 1.46 = \146.00 ; c. $\$1,000 \times 1.46 = \$1,460.00$

5-1. a. $0.52 \times 30 = 15.6$; b. $0.73 \times 20 = 14.6$

c. $0.31 \times 60 = 18.6$; d. $5.2 \times 40 = 208$

e. $4.3 \times 30 = 129$; f. $5.1 \times 70 = 357$

5-2. a. $3.3 \times 200 = 660$; b. $4.2 \times 300 = 1260$

c. $5.1 \times 400 = 2040$; d. $40 \times 0.62 = 24.8$

e. $30 \times 0.73 = 21.9$; f. $60 \times 0.51 = 30.6$

5-3. a. $40 @ \$0.41 = \16.40 ; b. $20 @ \$0.54 = \10.80

c. $70 @ \$0.31 = \21.70 ; d. $20 @ \$5.30 = \106.00

e. $400 @ \$0.52 = \208.00 ; f. $300 @ \$0.33 = \99.00

5-4. a. $80 @ 21¢ = \$16.80$; b. $40 @ \$0.25 = \10.00

c. $60 @ 75¢ = \$45.00$; d. $200 @ \$1.25 = \250.00

e. $17 @ \$30 = \510.00 ; f. $22 @ \$200 = \$4,400.00$

Review Assignment 8b.

1. estimate: (a) Find a rough product, round off; (a) Drop unwanted digits from the right. sales tax; (c) Collected by seller from buyer.

2. a. $25 + 15 = 40$; b. $15 - 9 = 6$; c. $7 \times 9 = 63$

$$\begin{array}{r}
 \begin{array}{r}
 \overset{10}{10} \overset{12}{12} \\
 10,131 \\
 - 8,286 \\
 \hline
 1,845
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{r}
 \overset{2}{2} \overset{4}{4} \\
 203.06 \\
 \times 1.08 \\
 \hline
 162448 \\
 20306 \\
 \hline
 2193048
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{r}
 \overset{3}{3} \overset{1}{1} \overset{2}{2} \\
 375 \text{ km} \\
 \times 42 \\
 \hline
 750 \\
 1500 \\
 \hline
 15750 \text{ km}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{r}
 \overset{10}{10} \\
 \$ 89 \\
 \times 12 \\
 \hline
 \$ 10.68
 \end{array}
 \end{array}$$

a. shoes

b. Socks

$\begin{array}{r} \$29.95 \\ \times .04 \\ \hline \$1.1980 \end{array}$	$\begin{array}{r} \$29.95 \\ + 1.20 \\ \hline \$31.15 \end{array}$	$\begin{array}{r} \$2.29 \\ \times 2 \\ \hline \$4.58 \end{array}$	$\begin{array}{r} \$4.58 \\ \times .04 \\ \hline \$.1832 \end{array}$	$\begin{array}{r} \$4.58 \\ + .18 \\ \hline \$4.76 \end{array}$
---	--	--	--	---

c. Work pants

$\begin{array}{r} \$29.91 \\ \times 3 \\ \hline \$29.91 \end{array}$	$\begin{array}{r} \$29.91 \\ \times .04 \\ \hline \$1.1964 \end{array}$	$\begin{array}{r} \$29.91 \\ + 1.20 \\ \hline \$31.11 \end{array}$
--	---	--

$\begin{array}{r} \$180 \\ \times 15 \\ \hline \$2700 \end{array}$	$\begin{array}{r} \$180 \\ \times .10 \\ \hline \$18.00 \end{array}$	$\begin{array}{r} 180 \\ \times 12 \\ \hline 2160 \end{array}$	$\begin{array}{r} \$18.00 \\ - 12.75 \\ \hline \$5.25 \end{array}$
--	--	--	--

$\begin{array}{r} \$768 \\ \times 8 \\ \hline \$6144 \end{array}$	a. $\begin{array}{r} \$768.00 \\ + 13.40 \\ \hline \$781.40 \end{array}$	$\begin{array}{r} \$15.95 \\ \times 96 \\ \hline \$1531.20 \end{array}$	b. $\begin{array}{r} \$1531.20 \\ - 781.40 \\ \hline \$749.80 \end{array}$
$\begin{array}{r} 14355 \\ \hline \$1,531,20 \end{array}$			

$\begin{array}{r} 45.7m \\ 30.5m \\ + 23.0m \\ \hline 99.2m \end{array}$	$\begin{array}{r} \$1.05 \\ \times 99.2 \\ \hline \$104.16 \end{array}$
$99.2m \times 1.05 = \$104.16$	

a. $\begin{array}{r} 5,700 \\ \times 234 \\ \hline 171000 \\ 1338000 \\ \hline 1,333,800 \end{array}$	b. $\begin{array}{r} 3,500 \\ \times 258 \\ \hline 28000 \\ 87500 \\ 105000 \\ \hline 903,000 \end{array}$	c. $\begin{array}{r} 4,600 \\ \times 490 \\ \hline 414000 \\ 2254000 \\ \hline 2,254,000 \end{array}$
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Unit 3. Section 8.
Part 8c.
Exercises 6-8.

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Exercise 6
(continued).

$$\begin{array}{r} 6-2. \text{ a. } 2,105 \\ \times 640 \\ \hline 8420 \\ 12630 \\ \hline 1,347,200 \end{array}$$

$$\begin{array}{r} \text{b. } 2,600 \\ \times 370 \\ \hline 182 \\ 78 \\ \hline 962,000 \end{array}$$

$$\begin{array}{r} \text{c. } \$13.50 \\ \times 24 \\ \hline 540 \\ 270 \\ \hline \$324.00 \end{array}$$

$$\begin{array}{r} 6-3. \text{ a. } \$6.70 \\ \times 56 \\ \hline 402 \\ 335 \\ \hline \$375.20 \end{array}$$

$$\begin{array}{r} \text{b. } \$2.36 \\ \times 350 \\ \hline 1180 \\ 708 \\ \hline \$826.00 \end{array}$$

$$\begin{array}{r} \text{c. } \$6.900 \\ \times 0.02136 \\ \hline 1414 \\ 207 \\ 69 \\ 138 \\ \hline \$147.38400 \end{array}$$

$$\begin{array}{r} 6-4. \text{ a. } 3,600 \\ \times \$4.68 \\ \hline 608 \\ 456 \\ 304 \\ \hline \$35568.00 \end{array}$$

$$\begin{array}{r} \text{b. } \$89.50 \\ \times 230 \\ \hline 2685 \\ 1790 \\ \hline \$20,585.00 \end{array}$$

$$\begin{array}{r} \text{c. } \$32,000 \\ \times 2.06 \\ \hline 192 \\ 64 \\ \hline \$65,920.00 \end{array}$$

$$7-1. 450 @ \$.10 = \$45.00$$

$$7-2. 218 @ \$.10 = \$21.80$$

$$7-3. 635 @ \$.01 = \$6.35$$

$$7-4. 156 @ \$.10 = \$15.60$$

$$7-5. 72 @ 10¢ = \$7.20$$

$$7-6. 1,520 @ 1¢ = \$15.20$$

$$7-7. 225 @ 1¢ = \$2.25$$

$$7-8. 62.5 @ \$.10 = \$6.25$$

$$7-9. 37.5 @ 10¢ = \$3.75$$

$$7-10. 1,200 @ \$.01 = \$12.00$$

$$7-11. 230 @ \$.10 = \$23.10$$

$$7-12. 2.6 @ 1¢ = 2.6¢$$

$$8-1. \text{ a. } 42 @ \$.04 = \$1.68$$

$$8-2. \text{ a. } 62 @ 6¢ = \$3.72$$

$$\text{b. } 115 @ \$.06 = \$6.90$$

$$\text{b. } 84 @ 5¢ = \$4.20$$

$$\text{c. } 93 @ \$.03 = \$2.79$$

$$\text{c. } 115 @ 3¢ = \$3.45$$

$$\text{d. } 130 @ \$.03 = \$3.90$$

$$\text{d. } 75 @ 7¢ = \$5.25$$

$$\text{e. } 210 @ \$.07 = \$14.70$$

$$\text{e. } 120 @ 8¢ = \$9.60$$

Section 8:

Unit 3.

Part 8c - Review Assignment 8c.

Exercise 8 (for Part 8c),

and Exercises 1-7 (for Review Assignment 8c).

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8-3. a. $53 @ \$.30 = \15.90 8-4. a. $65 @ \$.30 = \19.50
 b. $34 @ \$.20 = \6.80 b. $45 @ \$.60 = \27.00
 c. $62 @ \$.40 = \24.80 c. $230 @ \$.20 = \46.60
 d. $160 @ \$.90 = \14.40 d. $90 @ \$.70 = \63.00
 e. $230 @ \$.80 = \18.40 e. $75 @ \$.50 = \37.50

1. a. $15 + 7 = 22$ b. $8 \times 11 = 88$ c. $2,538 - 1,600 = 938$

2. a.
$$\begin{array}{r} 40,700 \\ \times 3,020 \\ \hline 814 \\ 1221 \\ \hline 122,914,000 \end{array}$$
 b.
$$\begin{array}{r} \$4,30 \\ \times 1600 \\ \hline 258 \\ 43 \\ \hline \$6,880.00 \end{array}$$
 c.
$$\begin{array}{r} 0.75 \text{ cm} \\ \times 1.5 \\ \hline 375 \\ 75 \\ \hline 1.125 \text{ cm} \end{array}$$

3.
$$\begin{array}{r} \$49.50 \\ \times .07 \\ \hline \$3.4650 \end{array}$$

$$\begin{array}{r} \$49.50 \\ + 3.47 \\ \hline \$52.97 \end{array}$$
 4.
$$\begin{array}{r} \$162.00 \\ + 107.95 \\ \hline \$269.95 \end{array}$$

5.
$$\begin{array}{r} \$52,260 \\ + 17,700 \\ \hline \$69,960 \end{array}$$
 a.
$$\begin{array}{r} \$69,960 \\ - 56,920 \\ \hline \$13,040 \end{array}$$
 b.
$$\begin{array}{r} \$18,620 \\ - 13,040 \\ \hline \$5,580 \end{array}$$

6.
$$\begin{array}{r} 72 \\ 2 \overline{)144} \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ \times \$.05 \\ \hline \$3.60 \end{array}$$

$$\begin{array}{r} \$8.80 \\ - 2.75 \\ \hline \$.85 \end{array}$$

7.
$$\begin{array}{r} \$9.75 \\ \times 100 \\ \hline \$975.00 \end{array}$$

$$\begin{array}{r} \$14.95 \\ \times 70 \\ \hline \$1,046.50 \end{array}$$

$$\begin{array}{r} \$11.95 \\ \times 30 \\ \hline \$358.50 \end{array}$$

$$\begin{array}{r} \$1,016.50 \\ + 358.50 \\ \hline \$1,375.00 \end{array}$$

$\$1,375.00 - \$975.00 = \$400.00$

Unit 3.

Sections 8-9.

Preview Assignment 8c - Part 9.

Exercises 8-9 (for Preview Assignment 8c),
and Exercise 1 - (for Part 9).

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Part 9: Preview Assignment 8c (continued)

8.	$\begin{array}{r} 250 \\ \times \$.75 \\ \hline 1250 \\ 1750 \\ \hline \$187.50 \end{array}$	$\begin{array}{r} \$187.50 \\ + 35.00 \\ \hline \$222.50 \end{array}$	$\begin{array}{r} 33 \\ \times \$.75 \\ \hline 165 \\ 231 \\ \hline \$24.75 \end{array}$	$\begin{array}{r} \$24.75 \\ + 197.85 \\ \hline \$222.60 \end{array}$	a. \$222.50 b. Over; by 10¢.
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9.

Dianne Stanley Reconciliation Statement May 1, 1981

Checkbook balance:		\$882.74
Less:		
Deposit entered twice in checkbook	\$15.00	
Check not recorded	<u>12.80</u>	<u>27.80</u>
Subtotal:		861.94
Add:		
Amount on check (too small)		<u>5.40</u>
Correct checkbook balance:		\$867.34

Section 9.

1-1. a. $12 @ 25¢$; $12 \times \frac{1}{4} = 3$; $3 \times \$1 = \3 .

b. $32 @ 25¢$; $32 \times \frac{1}{4} = 8$; $8 \times \$1 = \8 .

c. $36 @ 25¢$; $36 \times \frac{1}{4} = 9$; $9 \times \$1 = \9 .

d. $20 @ 25¢$; $20 \times \frac{1}{4} = 5$; $5 \times \$1 = \5 .

e. $24 @ 25¢$; $24 \times \frac{1}{4} = 6$; $6 \times \$1 = \6 .

1-2. a. $20 @ 50¢$; $20 \times \frac{1}{2} = 10$; $10 \times \$1 = \10 .

b. $26 @ 50¢$; $26 \times \frac{1}{2} = 13$; $13 \times \$1 = \13 .

c. $42 @ 50¢$; $42 \times \frac{1}{2} = 21$; $21 \times \$1 = \21 .

d. $34 @ 50¢$; $34 \times \frac{1}{2} = 17$; $17 \times \$1 = \17 .

e. $68 @ 50¢$; $68 \times \frac{1}{2} = 34$; $34 \times \$1 = \34 .

1-3. a. $12 @ 75¢$; $12 \times \frac{3}{4} = 9$; $9 \times \$1 = \9 .

b. $32 @ 75¢$; $32 \times \frac{3}{4} = 24$; $24 \times \$1 = \24 .

c. $20 @ \$.75$; $20 \times \frac{3}{4} = 15$; $15 \times \$1 = \15 .

d. $48 @ \$.75$; $48 \times \frac{3}{4} = 36$; $36 \times \$1 = \36 .

e. $84 @ \$.75$; $84 \times \frac{3}{4} = 63$; $63 \times \$1 = \63 .

1-4. a. $48 @ \$.25$; $48 \times \frac{1}{4} = 12$; $12 \times \$1 = \12 .

b. $28 @ 75¢$; $28 \times \frac{3}{4} = 21$; $21 \times \$1 = \21 .

c. $44 @ 25¢$; $44 \times \frac{1}{4} = 11$; $11 \times \$1 = \11 .

d. $36 @ \$.75$; $36 \times \frac{3}{4} = 27$; $27 \times \$1 = \27 .

e. $24 @ \$.75$; $24 \times \frac{3}{4} = 18$; $18 \times \$1 = \18 .

2-1. a. $80 @ 12\frac{1}{2}¢$; $80 \times \frac{1}{8} = 10$; $10 \times \$1 = \10 .

b. $32 @ \$.12\frac{1}{2}$; $32 \times \frac{1}{8} = 4$; $4 \times \$1 = \4 .

c. $40 @ \$.12\frac{1}{2}$; $40 \times \frac{1}{8} = 5$; $5 \times \$1 = \5 .

d. $40 @ 37\frac{1}{2}¢$; $40 \times \frac{3}{8} = 15$; $15 \times \$1 = \15 .

e. $48 @ 37\frac{1}{2}¢$; $48 \times \frac{3}{8} = 18$; $18 \times \$1 = \18 .

f. $88 @ \$.37\frac{1}{2}$; $88 \times \frac{3}{8} = 33$; $33 \times \$1 = \33 .

2-2. a. $16 @ \$.62\frac{1}{2}$; $16 \times \frac{5}{8} = 10$; $10 \times \$1 = \10 .

b. $56 @ 62\frac{1}{2}¢$; $56 \times \frac{5}{8} = 35$; $35 \times \$1 = \35 .

c. $72 @ 62\frac{1}{2}¢$; $72 \times \frac{5}{8} = 45$; $45 \times \$1 = \45 .

d. $24 @ \$.87\frac{1}{2}$; $24 \times \frac{7}{8} = 21$; $21 \times \$1 = \21 .

e. $88 @ \$.87\frac{1}{2}$; $88 \times \frac{7}{8} = 77$; $77 \times \$1 = \77 .

f. $16 @ \$.87\frac{1}{2}$; $16 \times \frac{7}{8} = 14$; $14 \times \$1 = \14 .

2-3. a. $96 @ 12\frac{1}{2}¢$; $96 \times \frac{1}{8} = 12$; $12 \times \$1 = \12 .

b. $80 @ 62\frac{1}{2}¢$; $80 \times \frac{5}{8} = 50$; $50 \times \$1 = \50 .

c. $32 @ \$.37\frac{1}{2}$; $32 \times \frac{3}{8} = 12$; $12 \times \$1 = \12 .

d. $72 @ \$.87\frac{1}{2}$; $72 \times \frac{7}{8} = 63$; $63 \times \$1 = \63 .

e. $48 @ 62\frac{1}{2}¢$; $48 \times \frac{5}{8} = 30$; $30 \times \$1 = \30 .

f. $320 @ \$.12\frac{1}{2}$; $320 \times \frac{1}{8} = 40$; $40 \times \$1 = \40 .

1-4. a. $64 @ 37\frac{1}{2}¢$; $64 \times \frac{3}{8} = 24$; $24 \times \$1 = \24 .

b. $64 @ \$.87\frac{1}{2}$; $64 \times \frac{7}{8} = 56$; $56 \times \$1 = \56 .

c. $56 @ \$.37\frac{1}{2}$; $56 \times \frac{3}{8} = 21$; $21 \times \$1 = \21 .

d. $112 @ 12\frac{1}{2}¢$; $112 \times \frac{1}{8} = 14$; $14 \times \$1 = \14 .

e. $160 @ \$.87\frac{1}{2}$; $160 \times \frac{7}{8} = 140$; $140 \times \$1 = \140 .

f. $240 @ 62\frac{1}{2}¢$; $240 \times \frac{5}{8} = 150$; $150 \times \$1 = \150 .

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3-1 a. $18 @ 33\frac{1}{3}\phi$; $18 \times \frac{1}{3} = 6$; $6 \times \$1 = \6 .

b. $33 @ \$33\frac{1}{3}$; $33 \times \frac{1}{3} = 11$; $11 \times \$1 = \11 .

c. $42 @ 33\frac{1}{3}\phi$; $42 \times \frac{1}{3} = 14$; $14 \times \$1 = \14 .

d. $24 @ 66\frac{2}{3}\phi$; $24 \times \frac{2}{3} = 16$; $16 \times \$1 = \16 .

e. $48 @ \$66\frac{2}{3}$; $48 \times \frac{2}{3} = 32$; $32 \times \$1 = \32 .

f. $27 @ 66\frac{2}{3}\phi$; $27 \times \frac{2}{3} = 18$; $18 \times \$1 = \18 .

3-2 a. $54 @ 16\frac{2}{3}\phi$; $54 \times \frac{1}{3} = 18$; $18 \times \$1 = \18 .

b. $30 @ \$16\frac{2}{3}$; $30 \times \frac{1}{3} = 10$; $10 \times \$1 = \10 .

c. $60 @ 16\frac{2}{3}\phi$; $60 \times \frac{1}{3} = 20$; $20 \times \$1 = \20 .

d. $36 @ 83\frac{1}{3}\phi$; $36 \times \frac{5}{6} = 30$; $30 \times \$1 = \30 .

e. $72 @ \$83\frac{1}{3}$; $72 \times \frac{5}{6} = 60$; $60 \times \$1 = \60 .

f. $12 @ 83\frac{1}{3}\phi$; $12 \times \frac{5}{6} = 10$; $10 \times \$1 = \10 .

3-3 a. $45 @ 33\frac{1}{3}\phi$; $45 \times \frac{1}{3} = 15$; $15 \times \$1 = \15 .

b. $66 @ \$16\frac{2}{3}$; $66 \times \frac{1}{3} = 22$; $22 \times \$1 = \22 .

c. $21 @ \$66\frac{2}{3}$; $21 \times \frac{2}{3} = 14$; $14 \times \$1 = \14 .

d. $54 @ 83\frac{1}{3}\phi$; $54 \times \frac{5}{6} = 45$; $45 \times \$1 = \45 .

e. $78 @ \$16\frac{2}{3}$; $78 \times \frac{1}{3} = 26$; $26 \times \$1 = \26 .

f. $96 @ 33\frac{1}{3}\phi$; $96 \times \frac{1}{3} = 32$; $32 \times \$1 = \32 .

3-4 a. $69 @ \$66\frac{2}{3}$; $69 \times \frac{2}{3} = 46$; $46 \times \$1 = \46 .

b. $60 @ 83\frac{1}{3}\phi$; $60 \times \frac{5}{6} = 50$; $50 \times \$1 = \50 .

c. $63 @ 66\frac{2}{3}\phi$; $63 \times \frac{2}{3} = 42$; $42 \times \$1 = \42 .

d. $120 @ \$33\frac{1}{3}$; $120 \times \frac{1}{3} = 40$; $40 \times \$1 = \40 .

e. $360 @ 83\frac{1}{3}\phi$; $360 \times \frac{5}{6} = 300$; $300 \times \$1 = \300 .

f. $240 @ \$16\frac{2}{3}$; $240 \times \frac{1}{3} = 80$; $80 \times \$1 = \80 .

4-1 a. $15 @ 20\phi$; $15 \times \frac{1}{5} = 3$; $3 \times \$1 = \3 .

b. $25 @ \$20$; $25 \times \frac{1}{5} = 5$; $5 \times \$1 = \5 .

c. $65 @ \$20$; $65 \times \frac{1}{5} = 13$; $13 \times \$1 = \13 .

d. $35 @ 40\phi$; $35 \times \frac{2}{5} = 14$; $14 \times \$1 = \14 .

4-2 a. $75 @ \$40$; $75 \times \frac{2}{5} = 30$; $30 \times \$1 = \30 .

b. $45 @ \$60$; $45 \times \frac{3}{5} = 27$; $27 \times \$1 = \27 .

c. $25 @ \$60$; $25 \times \frac{3}{5} = 15$; $15 \times \$1 = \15 .

Part 9 - Review Assignment 9.

Exercise 4 (for Part 9),
and Exercises 1-4 (for Review Assignment 9).

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d. $35 @ 80¢$; $35 \times \frac{4}{5} = 28$; $28 \times \$1 = \28 .

7-3. a. $55 @ \$.80$; $55 \times \frac{4}{5} = 44$; $44 \times \$1 = \44 .

b. $95 @ \$.20$; $95 \times \frac{1}{5} = 19$; $19 \times \$1 = \19 .

c. $65 @ \$.80$; $65 \times \frac{4}{5} = 52$; $52 \times \$1 = \52 .

d. $75 @ \$.60$; $75 \times \frac{3}{5} = 45$; $45 \times \$1 = \45 .

1-4. a. $125 @ \$.20$; $125 \times \frac{1}{5} = 25$; $25 \times \$1 = \25 .

b. $155 @ \$.40$; $155 \times \frac{2}{5} = 62$; $62 \times \$1 = \62 .

c. $300 @ \$.60$; $300 \times \frac{3}{5} = 180$; $180 \times \$1 = \180 .

d. $450 @ \$.80$; $450 \times \frac{4}{5} = 360$; $360 \times \$1 = \360 .

1. aliquot part: (b) a number which is contained in another without a remainder

base: (c) Any number with which another is compared

fractional equivalent: (a) shows what part one number is of another number.

2. a. $9 + 10 = 19$ b. $9 \times 6 = 54$ c. $24 \div 3 = 8$

3. a.
$$\begin{array}{r} 7 \overset{10}{9} \overset{13}{10} 3 \\ - 2,694 \\ \hline 5,409 \end{array}$$

b.
$$\begin{array}{r} 7,900 \\ \times 260 \\ \hline 4744 \\ 1588 \\ \hline 2,054,000 \end{array}$$

c.
$$\begin{array}{r} 1,700 \\ \times 3.40 \\ \hline 68 \\ 51 \\ \hline \$578,000 \end{array}$$

d.
$$\begin{array}{r} 19.80m \\ - 7.35m \\ \hline 12.25m \end{array}$$

Unit 3, Section 9.
Review Assignment 9.
Exercises 4-8.

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Exercises 4-8.
Unit 3 (continued)

4.

Oliver King Reconciliation Statement October 31, 1980	
Checkbook balance: \$1,007.13	Bank statement balance: \$1,142.15
Less:	Less outstanding checks:
Service charge 1.67	#232 \$98.84
	#241 37.85
	136.69
Corrected checkbook balance: \$1,005.46	Available bank balance: \$1,005.46

$$\begin{array}{r}
 5. \quad \$278.40 \quad \$284.80 \quad \text{Cash was over} \\
 - 60.00 \quad - 15.75 \quad \text{by } 35\text{¢} \\
 \hline
 \$218.40 \quad \$269.05
 \end{array}$$

$$\begin{array}{r}
 6. \quad \begin{array}{r} 200 \\ \times 75 \\ \hline 1000 \\ 1800 \\ \hline 190.00 \end{array} \quad \begin{array}{r} 27 \\ \times 75 \\ \hline 135 \\ 243 \\ \hline 25.65 \end{array} \quad \begin{array}{r} \$190.00 \\ + 25.65 \\ \hline \$215.65 \end{array} \quad \begin{array}{r} \$189.65 \\ + 25.65 \\ \hline \$215.30 \end{array} \\
 \text{Cash was over by } 30\text{¢}.
 \end{array}$$

$$\begin{array}{r}
 7. \quad \begin{array}{r} \$3.55 \\ \times 20 \\ \hline \$71.00 \end{array} \quad \begin{array}{r} 120 \\ \times 69 \\ \hline 1080 \\ 720 \\ \hline 1080 \end{array} \quad \begin{array}{r} \$82.80 \\ - 71.00 \\ \hline \$11.80 \end{array}
 \end{array}$$

$$\begin{array}{r}
 8. \quad \begin{array}{r} \$12.95 \\ \times 20 \\ \hline \$259.00 \\ + 7.50 \\ \hline \$266.50 \end{array} \quad \begin{array}{r} \$21.95 \\ \times 20 \\ \hline \$439.00 \end{array} \quad \begin{array}{r} \$479.00 \\ - 266.50 \\ \hline \$212.50 \end{array}
 \end{array}$$

Sections 9-10.

Unit 3.

Review Assignment 9-Part 10a.

Exercises 9-10 (for Review Assignment 9),
and Exercises 1-2 (for Part 10a).

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300	\$ ⁸ 3.95	\$ ³ 2.95	\$1,027.00
$\times \$2.60$	$\times 260$	$\times 40$	$+ 118.00$
1800	2370	\$118.00	\$1,145.00
600	790		
\$780.00	\$1,027.00		\$ ¹⁰ 1,145.00
+ 15.00			= 795.00
\$795.00			\$ 350.00

Marcia Sung	
Reconciliation Statement	
March 31, 1981	
Checkbook balance:	\$498.32
Less:	
Check not recorded	\$ 10.87
Deposit entered twice in checkbook	35.00
Service charge	1.70
	47.57
Sub-total:	450.75
Add: Amount on check stub (too small)	5.40
Correct checkbook balance:	\$456.15

Section 10,

-1. $\$99 \div 5 = \$19\frac{4}{5} = \$20$, 1-2. $\$1.00 \div 7 = \$14\frac{2}{7} = \$15$,
 3. $\$.73 \div 5 = \$14\frac{3}{5} = \$15$, 1-4. $\$.83 \div 10 = \$8\frac{3}{10} = \$9$,
 5. $\$.32 \div 6 = \$5\frac{1}{3} = \$6$, 1-6. $\$.95 \div 3 = \$31\frac{2}{3} = \$32$,
 7. $\$.89 \div 4 = \$22\frac{1}{4} = \$23$, 1-8. $\$.97 \div 3 = \$32\frac{1}{3} = \$33$,
 -9. $\$.79 \div 6 = \$13\frac{1}{6} = \$14$, 1-10. $\$2.50 \div 3 = \$83\frac{1}{3} = \$84$.

-1. $16 \times \frac{\$3.29}{6} = 8 \times \frac{\$3.29}{3} = \frac{\$26.32}{3} = \$8.77\frac{1}{3} = \$8.78$,
 -2. $76 \times \frac{\$1.69}{28} = 4 \times \frac{\$1.69}{7} = \frac{\$6.76}{7} = \$96\frac{4}{7} = \$97$,
 -3. $16 \times \frac{\$.26}{12} = 4 \times \frac{\$.26}{3} = \frac{\$1.04}{3} = \$34\frac{2}{3} = \$35$,
 -4. $16 \times \frac{\$.99}{7} = \frac{\$15.84}{7} = \$2.26\frac{2}{7} = \2.27 ,
 -5. $16 \times \frac{\$.59}{5} = \frac{\$9.44}{5} = \$1.88\frac{4}{5} = \1.89 .

Unit 3. Section 10.
Parts 10a-10b.
Exercises 3-5.

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3-1. $1000 \times \frac{\$3.10}{200} = \frac{\$3,100}{200} = \$15.50.$

3-2. $1000 \times \frac{\$4.95}{200} = \frac{\$4,950}{200} = \$24.75.$

3-3. $1000 \times \frac{\$3.00}{200} = \frac{\$3,000}{200} = \$15.00.$

3-4. $1000 \times \frac{\$1.58}{500} = \frac{\$1,580}{500} = \$3.16.$

3-5. $1000 \times \frac{\$2.31}{340} = \frac{\$2,310}{340} = \$6.80.$

4-1. a. $6 \div 2 = 3$ b. $6 \div 3 = 2$ c. $1 \div 1 = 1$ d. $0 \div 4 = 0$

4-2. a. $5 \div 1 = 5$ b. $0 \div 5 = 0$ c. $6 \div 1 = 6$ d. $6 \div 6 = 1$

4-3. a. $2 \div 2 = 1$ b. $N \div 1 = N$ c. $*N \div 1 = 1$ d. $*0 \div N = 0$

4-4. a. $\frac{8}{4} = 2$ b. $\frac{7}{7} = 1$ c. $\frac{0}{6} = 0$ d. $\frac{N}{1} = N$

5-1. a. $9 \div 3 = 3$

b. $27 \div 9 = 3$

c. $27 \div 3 = 9$

d. $24 \div 8 = 3$

e. $15 \div 5 = 3$

f. $15 \div 5 = 3$

g. $12 \div 6 = 2$

h. $18 \div 6 = 3$

5-2. a. $8 \div 4 = 2$

b. $24 \div 4 = 6$

c. $24 \div 6 = 4$

d. $18 \div 3 = 6$

e. $16 \div 8 = 2$

f. $14 \div 7 = 2$

g. $30 \div 5 = 6$

h. $30 \div 3 = 10$

5-3. a. $18 \div 3 = 6$

b. $24 \div 3 = 8$

c. $12 \div 3 = 4$

d. $12 \div 4 = 3$

e. $28 \div 7 = 4$

f. $25 \div 5 = 5$

g. $30 \div 6 = 5$

h. $36 \div 4 = 9$

5-4. a. $21 \div 7 = 3$

b. $21 \div 3 = 7$

c. $20 \div 4 = 5$

d. $20 \div 5 = 4$

e. $16 \div 4 = 4$

f. $28 \div 4 = 7$

g. $32 \div 8 = 4$

h. $10 \div 5 = 2$

5-5. a. $4 \div 2 = 2$

b. $36 \div 12 = 3$

c. $8 \div 2 = 4$

d. $48 \div 12 = 4$

e. $12 \div 2 = 6$

f. $12 \div 12 = 1$

g. $10 \div 2 = 5$

h. $24 \div 12 = 2$

*Providing that N does not equal zero.

Section 10.

Unit 3.

Review Assignment 10b. - Part 10

Exercises 1-6.

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1. dividend: (c) A number to be divided.
divisor: (b) Shows size or number of groups to be formed.
quotient: (a) Shows how many times the divisor is included in the dividend.

2. a. $8,100 \times 620 = 5,022,000$
b. $2,140 \text{ lb.} @ 12\frac{1}{2}\text{¢}$
 $2,140 \times \frac{1}{8} = 267\frac{1}{2}$
 $267\frac{1}{2} \times \$1 = \267.50
c. $306 @ 16\frac{2}{3}\text{¢}$
 $306 \times \frac{1}{6} = 51$
 $51 \times \$1 = \51

d. $\begin{array}{r} 316 \\ \$395.46 \\ - 85.07 \\ \hline \$310.39 \end{array}$
e. $\begin{array}{r} 615 \\ 75 \text{ km}^2 \\ - 27 \text{ km}^2 \\ \hline 48 \text{ km}^2 \end{array}$

3. $16 \times \frac{\$.90}{14} = 8 \times \frac{\$.90}{7} = \frac{\$.72}{7} = \$1.02\frac{2}{7} = \$1.03$
 $16 \times \frac{\$.92}{24} = 2 \times \frac{\$.92}{3} = \frac{\$.92}{3} = \1.92

- a. Brand X is $\$1.03 \text{ lb.}$, Brand Y is $\$.92 \text{ lb.}$
b. Brand Y is cheaper by 11¢ .

4. $\begin{array}{r} 13 \\ 398\frac{1}{3} = \$3.99 \\ 3) \$11.95 \\ \hline \$4.4\frac{2}{3} \\ - 3.99 \\ \hline \$.46 \end{array}$ You would save 36¢ .

5. $\begin{array}{r} \$8.25 \quad 100 \quad 60 \quad \$7.9 \quad \$47.40 \\ \times 3 \quad \times 3 \quad 5)300 \quad \times 60 \quad -24.75 \\ \hline \$24.75 \quad 300 \quad \$47.40 \quad \$22.65 \end{array}$
The gross profit was $\$22.65$.

6. $\begin{array}{r} \$9.65 \\ \times 1 \\ \hline \$9.65 \end{array}$
 $\begin{array}{r} \$12.87 \\ - 9.65 \\ \hline \$3.22 \end{array}$
 $\begin{array}{r} \$154.70 \\ + 3.22 \\ \hline \$157.92 \end{array}$

Unit 3.

Section 10.

Review Assignment 10b - Part 10c.

Exercise 7 (for Review Assignment 10b),
and Exercises 6-9 (for Part 10c).

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Review Assignment 10b (continued).

7.	$\begin{array}{r} \overset{3}{H} \\ \$1.50 \\ \times 268 \\ \hline 1200 \\ 900 \\ 300 \\ \hline \$402.00 \end{array}$	$\begin{array}{r} \overset{4}{L} \\ \$.75 \\ \times 484 \\ \hline 300 \\ 600 \\ 300 \\ \hline \$363.00 \end{array}$	$\begin{array}{r} \overset{11}{I} \\ \$75.00 \\ \times 402.00 \\ \hline +363.00 \\ \hline \$840.00 \end{array}$
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Part 10c.

6-1.	$\overset{F}{8} \times \overset{F}{6} = \overset{P}{48}$	6-2.	$\overset{F}{12} \times \overset{F}{8} = \overset{P}{96}$	6-3.	$\overset{P}{48} \div \overset{F}{6} = \overset{F}{8}$
6-4.	$\overset{P}{32} \div \overset{F}{2} = \overset{F}{16}$	6-5.	$\overset{F}{4} \times \overset{F}{3} = \overset{P}{12}$	6-6.	$\overset{P}{24} \div \overset{F}{4} = \overset{F}{6}$
6-7.	$\overset{P}{18} \div \overset{F}{6} = \overset{F}{3}$	6-8.	$\overset{F}{9} \times \overset{F}{6} = \overset{P}{54}$	6-9.	$\overset{F}{7} \times \overset{F}{5} = \overset{P}{35}$
6-10.	$\overset{P}{26} \div \overset{F}{2} = \overset{F}{13}$	6-11.	$\overset{P}{12} \div \overset{F}{8} = \overset{F}{1.5}$	6-12.	$\overset{P}{35} \div \overset{F}{5} = \overset{F}{7}$
6-13.	$\overset{F}{3} \times \overset{F}{5} = \overset{P}{15}$	6-14.	$\overset{F}{1} \div \overset{F}{1} = \overset{P}{1}$	6-15.	$\overset{F}{12} \times \overset{F}{8} = \overset{P}{96}$
6-16.	$\overset{P}{12} \div \overset{F}{5} = \overset{F}{2.4}$	6-17.	$\overset{P}{36} = \overset{F}{3} \times \overset{F}{12}$	6-18.	$\overset{F}{15} = \overset{F}{3} \times \overset{F}{5}$

7. All problems in this exercise are same as 6.

8-1. a. product b. factor c. factor
d. factor e. product f. product
g. factor h. product i. product
j. factor k. product l. factor

8-2. a. $13 \times 5 = 65$ b. $9 \times 8 = 72$ c. $12 \times 5 = 60$
d. $96 \div 12 = 8$ e. $84 \div 7 = 12$ f. $135 = 9 \times 15$
g. $96 = 8 \times 12$ h. $12 = 108 \div 9$ i. $10 = 50 \div 5$
j. $48 = 3 \times 16$ k. $171 \div 3 = 57$ l. $7 \times 12 = 84$

9-1. $\overset{F}{16} \times \overset{F}{17} = \overset{P}{272}$; $n = 13$ 9-2. $\overset{P}{x} \div \overset{F}{17} = \overset{F}{2}$; $x = 357$
9-3. $\overset{P}{136} \div \overset{F}{17} = \overset{F}{8}$; $y = 8$ 9-4. $\overset{F}{z} = \overset{P}{391} \div \overset{F}{23}$; $z = 17$
9-5. $\overset{F}{19} \times \overset{F}{a} = \overset{P}{361}$; $a = 27$ 9-6. $\overset{P}{r} \div \overset{F}{13} = \overset{F}{26}$; $r = 338$
9-7. $\overset{P}{23} = \overset{F}{391} \div \overset{F}{17}$; $s = 17$ 9-8. $\overset{F}{15} \times \overset{F}{t} = \overset{P}{195}$; $t = 13$

Section 10.

Review Assignment 10c.

Exercises 1-7!

Unit 3.

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1. a. $25 \times n = 475$ b. $x \div 19 = 34$ c. $390 \div y = 26$
 $n = 19$ $x = 646$ $y = 15$

2. a.
$$\begin{array}{r} 1,040 \\ \times 20.84 \\ \hline 4160 \\ 8320 \\ 2080 \\ \hline 21,673.60 \end{array}$$
 b.
$$\begin{array}{r} \$ 4.70 \\ \times 1,300 \\ \hline 1410 \\ 470 \\ \hline \$6,110.00 \end{array}$$
 c.
$$\begin{array}{r} 3 \text{ km} \\ 460 \text{ km} \\ 27 \text{ km} \\ \hline + 1,644 \text{ km} \\ \hline 2,134 \text{ km} \end{array}$$

3.
$$\begin{array}{r} \$12 \\ \times 10 \\ \hline \$120 \end{array}$$

$$\begin{array}{r} 16 \\ \times 10 \\ \hline 160 \end{array}$$

$$\begin{array}{r} 160 \\ \times 6 \\ \hline 960 \end{array}$$

$$\begin{array}{r} \$1.25 \\ \times 154 \\ \hline 1500 \\ 625 \\ 125 \\ \hline \$192.50 \end{array}$$

$$\begin{array}{r} \$192.50 \\ - 120.00 \\ \hline \$ 72.50 \end{array}$$

4.
$$\begin{array}{r} \$.98 \\ \times 12 \\ \hline \$ 11.76 \end{array}$$

$$\begin{array}{r} \$2.35 \\ \times 4 \\ \hline \$10.40 \end{array}$$

$$\begin{array}{r} \$ 11.76 \\ - 10.40 \\ \hline \$ 1.36 \end{array}$$

5.
$$\begin{array}{r} 24 \\ \times 5 \\ \hline 120 \end{array}$$

$$\begin{array}{r} \$7.20 \\ \times 5 \\ \hline \$36.20 \end{array}$$

$$\begin{array}{r} \$.99 \\ \times .60 \\ \hline \$ 59.40 \end{array}$$

$$\begin{array}{r} \$ 59.40 \\ - 36.20 \\ \hline \$ 23.20 \end{array}$$

6.
$$\begin{array}{r} \$13.50 \\ \times 80 \\ \hline \$1,080.00 \\ + 15.60 \\ \hline \$1,095.60 \end{array}$$

$$\begin{array}{r} \$21.95 \\ \times 68 \\ \hline 17560 \\ 13170 \\ \hline \$1,492.60 \end{array}$$

$$\begin{array}{r} \$17.50 \\ \times 12 \\ \hline \$210.00 \\ + 1,492.60 \\ \hline \$1,702.60 \\ - 1,095.60 \\ \hline \$ 607.00 \end{array}$$
 7.
$$\begin{array}{r} 60 \text{ cm} \\ \times 38 \text{ cm} \\ \hline 480 \\ 180 \\ \hline 2,280 \text{ cm}^2 \end{array}$$

Unit 3, Section 10.
Part 10d.
Exercise 10.

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Part 10d. 10-1.

$$\begin{array}{r} \overset{23}{234} \\ 8 \overline{) 1,872} \\ \underline{16} \\ 27 \\ \underline{24} \\ 32 \\ \underline{32} \\ 0 \end{array}$$

$$\begin{array}{r} \overset{42}{453} \\ 9 \overline{) 4,077} \\ \underline{36} \\ 47 \\ \underline{45} \\ 27 \\ \underline{27} \\ 0 \end{array}$$

$$\begin{array}{r} \overset{42}{374} \\ 6 \overline{) 2,244} \\ \underline{18} \\ 44 \\ \underline{42} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

$$\begin{array}{r} \overset{5}{308} \\ 7 \overline{) 2,156} \\ \underline{21} \\ 56 \\ \underline{56} \\ 0 \end{array}$$

$$\begin{array}{r} \overset{11}{743\frac{3}{4}} \\ 4 \overline{) 2,975} \\ \underline{28} \\ 17 \\ \underline{16} \\ 15 \\ \underline{12} \\ 3 \end{array}$$

$$\begin{array}{r} \overset{3}{517} \\ 5 \overline{) 2,585} \\ \underline{25} \\ 8 \\ \underline{5} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

$$\begin{array}{r} \overset{2}{503\frac{3}{2}} \\ 9 \overline{) 4,533} \\ \underline{45} \\ 33 \\ \underline{27} \\ 6 \end{array}$$

$$\begin{array}{r} \overset{2}{503} \\ \times 9 \\ \hline 4,527 \\ + 6 \\ \hline 4,533 \end{array}$$

Section 10.
Part 10d.
Exercise 10.

Unit 3.

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10-8. $218\frac{5}{8}$ 218
 $8 \overline{) 1,749}$ $\times 8$
 $\underline{16}$ $\underline{1,744}$
 14 $4 \quad 5$
 $\underline{8}$ $\underline{1,749}$
 69
 $\underline{64}$
 5

10-9. $291\frac{1}{2}$ 291
 $6 \overline{) 1,749}$ $\times 6$
 $\underline{12}$ $\underline{1,746}$
 54 $+ \quad 3$
 $\underline{54}$ $\underline{1,749}$
 9
 $\underline{6}$
 3

10-10. $406\frac{2}{5}$ 406
 $5 \overline{) 2,032}$ $\times 5$
 $\underline{20}$ $\underline{2,030}$
 32 $+ \quad 2$
 $\underline{30}$ $\underline{2,032}$
 2

10-11. $34\frac{5}{12}$ 34
 $12 \overline{) 413}$ $\times 12$
 $\underline{36}$ $\underline{68}$
 53 $\underline{34}$
 $\underline{48}$ $\underline{408}$
 5 $+ \quad 5$
 $\underline{413}$

10-12. $42\frac{3}{16}$ 42
 $16 \overline{) 675}$ $\times 16$
 $\underline{64}$ $\underline{252}$
 35 $\underline{42}$
 $\underline{32}$ $\underline{672}$
 3 $+ \quad 3$
 $\underline{675}$

10-13. $23\frac{1}{4}$ 23
 $24 \overline{) 558}$ $\times 24$
 $\underline{48}$ $\underline{92}$
 78 $\underline{46}$
 $\underline{72}$ $\underline{552}$
 6 $+ \quad 6$
 $\underline{558}$

10-14. $34\frac{1}{6}$ 34
 $36 \overline{) 1,230}$ $\times 36$
 $\underline{108}$ $\underline{204}$
 $\underline{150}$ $\underline{102}$
 $\underline{144}$ $\underline{1,224}$
 6 $+ \quad 6$
 $\underline{1,230}$

10-15. $31\frac{3}{8}$ 31
 $32 \overline{) 1,004}$ $\times 32$
 $\underline{96}$ $\underline{62}$
 $\underline{44}$ $\underline{93}$
 $\underline{32}$ $\underline{992}$
 $\underline{12}$ $+ \quad 12$
 $\underline{1,004}$

Unit 3.

Section 10.

Part 10d.

Exercise 11.

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$$\begin{array}{r}
 11-1. \quad \begin{array}{r} 3.86 \\ 7 \overline{) 27.02} \\ \underline{21} \\ 60 \\ \underline{56} \\ 42 \\ \underline{42} \end{array} \quad \begin{array}{r} 64 \\ 3.86 \\ \times 7 \\ \hline 27.02 \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-2. \quad \begin{array}{r} 8.57 \\ 6 \overline{) 51.42} \\ \underline{48} \\ 34 \\ \underline{30} \\ 42 \\ \underline{42} \end{array} \quad \begin{array}{r} 34 \\ 8.57 \\ \times 6 \\ \hline 51.42 \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-3. \quad \begin{array}{r} .645 \\ 8 \overline{) 5.160} \\ \underline{48} \\ 36 \\ \underline{36} \\ 40 \\ \underline{40} \end{array} \quad \begin{array}{r} 34 \\ .645 \\ \times 8 \\ \hline 5.160 \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-4. \quad \begin{array}{r} 54.4 \\ 9 \overline{) 489.6} \\ \underline{45} \\ 39 \\ \underline{36} \\ 36 \\ \underline{36} \end{array} \quad \begin{array}{r} 33 \\ 54.4 \\ \times 9 \\ \hline 489.6 \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-5. \quad \begin{array}{r} .1012 \\ 8 \overline{) 0.8096} \\ \underline{0.8} \\ 09 \\ \underline{08} \\ 16 \\ \underline{16} \end{array} \quad \begin{array}{r} 1 \\ .1012 \\ \times 8 \\ \hline .8096 \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-6. \quad \begin{array}{r} 368.42 \\ 5 \overline{) 1842.10} \\ \underline{15} \\ 34 \\ \underline{30} \\ 42 \\ \underline{40} \\ 21 \\ \underline{20} \\ 10 \\ \underline{10} \end{array} \quad \begin{array}{r} 368.42 \\ 1842.10 \\ \times 5 \\ \hline 9210.50 \end{array}
 \end{array}$$

Section 10.
Part 10d.
Exercises 11.

Unit 3.

63

$$\begin{array}{r}
 11-7. \quad \begin{array}{r} 1,229 \\ 7 \overline{) 8,603} \\ \underline{7} \\ 16 \\ \underline{14} \\ 20 \\ \underline{14} \\ 63 \\ \underline{63} \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-8. \quad \begin{array}{r} 3.14 \\ 22 \overline{) 69.08} \\ \underline{66} \\ 30 \\ \underline{22} \\ 88 \\ \underline{88} \end{array}
 \end{array}$$

$$\begin{array}{r}
 3.14 \\
 \times 22 \\
 \hline
 628 \\
 628 \\
 \hline
 69.08
 \end{array}$$

$$\begin{array}{r}
 11-9. \quad \begin{array}{r} 1415 \\ 35 \overline{) 14,525} \\ \underline{140} \\ 52 \\ \underline{35} \\ 175 \\ \underline{175} \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-10. \quad \begin{array}{r} 30.01 \\ 25 \overline{) 750.25} \\ \underline{75} \\ 025 \\ \underline{025} \\ 025 \\ \underline{025} \end{array}
 \end{array}$$

$$\begin{array}{r}
 30.01 \\
 \times 25 \\
 \hline
 15005 \\
 6002 \\
 \hline
 750.25
 \end{array}$$

$$\begin{array}{r}
 11-11. \quad \begin{array}{r} 252 \\ 32 \overline{) 8,064} \\ \underline{64} \\ 166 \\ \underline{160} \\ 64 \\ \underline{64} \end{array}
 \end{array}$$

$$\begin{array}{r}
 11-12. \quad \begin{array}{r} .006 \\ 24 \overline{) 0.144} \\ \underline{0144} \end{array}
 \end{array}$$

$$\begin{array}{r}
 .006 \\
 \times 24 \\
 \hline
 24 \\
 12 \\
 \hline
 .0144
 \end{array}$$

Unit 3.

Section 10.

Part 10 d.

Exercise 12.

64

$$\begin{array}{r}
 12-1. \quad \begin{array}{r} 30.0 \\ 72 \overline{) 2160.0} \\ \underline{2160.0} \end{array} \quad \begin{array}{r} 300 \\ \times 7.2 \\ \hline 600 \\ 2100 \\ \hline 2160.0 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-2. \quad \begin{array}{r} 300 \\ 0.072 \overline{) 21.600} \\ \underline{21.600} \end{array} \quad \begin{array}{r} 300 \\ \times 0.072 \\ \hline 600 \\ 2100 \\ \hline 21.600 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-3. \quad \begin{array}{r} 30 \\ 0.0072 \overline{) 0.2160} \\ \underline{0.2160} \end{array} \quad \begin{array}{r} 0.0072 \\ \times 30 \\ \hline 0.2160 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-4. \quad \begin{array}{r} 30 \\ 0.0144 \overline{) 0.4320} \\ \underline{0.4320} \end{array} \quad \begin{array}{r} 1 \\ 0.0144 \\ \times 30 \\ \hline 0.4320 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-5. \quad \begin{array}{r} 0.02 \\ 32.5 \overline{) 0.650} \\ \underline{0.650} \end{array} \quad \begin{array}{r} 1 \\ 32.5 \\ \times 0.02 \\ \hline .650 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-6. \quad \begin{array}{r} 0.04 \\ 4.5 \overline{) 0.180} \\ \underline{0.180} \end{array} \quad \begin{array}{r} 2 \\ 4.5 \\ \times 0.04 \\ \hline 0.180 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-7. \quad \begin{array}{r} .002 \\ 13.5 \overline{) 0.270} \\ \underline{0.270} \end{array} \quad \begin{array}{r} 1 \\ 13.5 \\ \times .002 \\ \hline .270 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-8. \quad \begin{array}{r} .04 \\ 133 \overline{) 5.32} \\ \underline{532} \end{array} \quad \begin{array}{r} 11 \\ 133 \\ \times .04 \\ \hline 532 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-9. \quad \begin{array}{r} .5 \\ 0.25 \overline{) 0.125} \\ \underline{0.125} \end{array} \quad \begin{array}{r} 1 \\ 0.25 \\ \times .5 \\ \hline .125 \end{array}
 \end{array}$$

$$\begin{array}{r}
 12-10. \quad \begin{array}{r} .25 \\ 0.05 \overline{) 0.125} \\ \underline{010} \\ 25 \\ \underline{25} \end{array} \quad \begin{array}{r} 0.05 \\ \times 2.5 \\ \hline 25 \\ 10 \\ \hline .125 \end{array}
 \end{array}$$

Section 10.

Unit 5.

Part 10d - Review Assignment 10d.

Exercise 12 (for Part 10d),
and Exercises 1-4 (for Review Assignment 10d).

65

$$12-11. \quad \begin{array}{r} 3.5 \\ 0.04 \overline{) 0.140} \\ \underline{012} \\ 20 \\ \underline{20} \\ 0 \end{array} \quad \begin{array}{r} 0.04 \\ \times 3.5 \\ \hline 20 \\ 12 \\ \hline .140 \end{array}$$

$$12-12. \quad \begin{array}{r} .04 \\ 0.25 \overline{) 0.0100} \\ \underline{00100} \\ 0 \end{array} \quad \begin{array}{r} .04 \\ \times 0.25 \\ \hline .0100 \end{array}$$

1. a. $k \div 16 = 32$ b. $45 \times m = 360$ c. $35 = 490 \div a$
 $k = 512$ $m = 8$ $a = 14$

$$2. a. \quad \begin{array}{r} 3.64 \\ 27 \overline{) 98.28} \\ \underline{81} \\ 172 \\ \underline{162} \\ 108 \\ \underline{108} \\ 0 \end{array} \quad \begin{array}{r} 3.64 \\ \times 27 \\ \hline 2548 \\ 728 \\ \hline 9828 \end{array}$$

$$b. \quad \begin{array}{r} 3.24 \\ 8.21 \overline{) 26.6004} \\ \underline{2463} \\ 1970 \\ \underline{1642} \\ 3284 \\ \underline{3284} \\ 0 \end{array} \quad \begin{array}{r} 3.24 \\ \times 8.21 \\ \hline 324 \\ 648 \\ 2592 \\ \hline 266004 \end{array}$$

3. 802.1
 $\times 3.07$
 $\hline 56147$
 24063
 $\hline 2462447$

d. $2,310 \text{ lb. @ } 25\text{¢}$
 $2,310 \times \frac{1}{4} = 577.50$
 $577.50 \times \$1 = \577.50

e. 411 km
 $4 \overline{) 1644} \text{ km}$
 $\hline 411 \text{ km}$
 $\times 4$
 $\hline 1644 \text{ km}$

3. $\$95.00$
 $+ 75.00$
 $\hline \$170.00$

4. 250
 $\times \$1.68$
 $\hline 2000$
 1500
 $\hline \$170.00$
 $+ 45.00$
 $\hline \$215.00$

Unit 3, Section 10,

Review Assignment 10d,

Exercises 5-9,

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Review Assignment 10d (continued)

Luan Day Reconciling Statement May 1, 1981	
Checkbook balance: \$487.32	Bank statement balance: \$511.18
Less:	Less outstanding checks:
Service charge 2.10	#211 \$18.52
	#217 7.41
	25.93
Correct checkbook balance: \$485.22	Available bank balance: \$485.22

6.	200	300	\$150.00	\$.75	\$.50
	$\times \$.75$	$\times \$.50$	150.00	$\times 40$	$\times 28$
	1000	\$150.00	+ 15.00	\$30.00	400
	1400		\$315.00		100
	\$150.00				\$14.00

\$30.00 Over;
14.00 by \$1.00.
+272.00
\$316.00

7.	\$16,926	\$22,016
	+23,435	-18,113
	\$40,361	\$3,903
	-18,345	
	\$22,016	

8.	5 $\frac{1}{3}$
	75 cm) 400 cm
	375
	25 cm

9.	Correct checkbook balance: \$634.23
	Less:
	Service charge \$1.95
	Deposit entered twice in checkbook 30.00
	Check not written 25.00
	56.95
	Sub-total: 577.28
	Add: Amount on check (too small) 10.00
	Correct checkbook balance: \$587.28

a. 5
b. 25 cm

Section 11.

Unit 3.

Parts 11a-11b, - Review Assignment

Exercises 1-3. (for Parts 11a and 11b),

and Exercise 11 for Review Assignment (11b).

67

- 1-1. 225 bolts @ \$2.40 per 100; 1-2. 450 lb. wire @ \$16 per cwt.;
 $225 \times \$2.40 = \540.00 ; $450 \times \$16 = \$7,200$;
 $\$540.00 \div 100 = \5.40 . $\$7,200 \div 100 = \7.20 .
3. 120 hooks @ \$2.40 per C; 1-4. 3,460 cards @ \$2.20 per \$1,000.
 $120 \times \$2.40 = \288.00 ; $3,460 \times \$2.20 = \$7,612$;
 $\$288.00 \div 100 = \2.88 . $\$7,612 \div 1,000 = \7.61 .
5. 350 clips @ \$6 per hundred; 1-6. 2,500 bricks @ \$115 per 1,000.
 $350 \times \$6 = \210 ; $2,500 \times \$115 = \$287,500$;
 $\$210 \div 1,000 = \0.21 $\$287,500 \div 1,000 = \287.50 .
- 1-7. 425 rivets @ \$11 per M; 1-8. 650 lb. @ \$14 per cwt.;
 $425 \times \$11 = \$4,675$; $650 \times \$14 = \$9,100$;
 $\$4,675 \div 1,000 = \4.68 . $\$9,100 \div 100 = \91 .
9. 1,560 lb. @ \$22 per T. 1-10. 2,475 lb. @ \$10.40 per T.
 $1,560 \times \$22 = \$34,320$; $2,475 \times \$10.40 = \$25,740$;
 $\$34,320 \div 2,000 = \17.16 . $\$25,740 \div 2,000 = \12.87 .
11. 10,000 kg @ \$8.50 per t. 1-12. 200 kg @ \$8 per metric ton.
 $10,000 \times \$8.50 = \$85,000$. $200 \times \$8 = \$1,600$;
 $\$85,000 \div 1,000 = \85 . $\$1,600 \div 1,000 = \1.60 .

- 2-1. a. $2,300 \div 10 = 230$ 2-2. a. $8.4 \div 10 = .84$
 b. $64,000 \div 100 = 640$ b. $3,895.4 \div 1,000 = 3.8954$
 c. $58,000 \div 1,000 = 58$ c. $3.9 \div 10 = .39$
3. a. $60 \div 100 = .6$ 2-4. a. $40 \div 1,000 = .04$
 b. $500 \div 1,000 = .5$ b. $0.05 \div 10 = 0.005$
 c. $7 \div 100 = .07$ c. $9.06 \div 100 = 0.0906$

- 3-1. 200 articles @ \$15 per C; 3-2. 1,200 lb. @ \$3 per cwt.
 $200 \times \$15 = \$3,000$; $1,200 \times \$3 = \$3,600$;
 $\$3,000 \div 100 = 30$. $\$3,600 \div 100 = \36 .
- 3-3. 135 articles @ \$10 per C; 3-4. 160 lb. @ \$.70 per cwt.;
 $135 \times \$10 = \$1,350$; $160 \times \$.70 = \112.00 ;
 $\$1,350 \div 100 = \13.50 $\$112.00 \div 100 = \1.12 .

Unit 3.

Section 11.

Part 11b - Review Assignment 11b.

Exercise 3 (for Part 11b),

and Exercises 1-3 (for Review Assignment 11b).

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$$3-5. 400 \text{ items at } 90\text{¢ per C;} \\ 400 \times \$0.90 = \$360.00; \\ \$360.00 \div 100 = \$3.60.$$

$$3-7. 4,500 @ \$10 \text{ per M;} \\ 4,500 \times \$10 = \$45,000; \\ \$45,000 \div 1,000 = \$45.$$

$$3-9. 3,000 \text{ lb. @ } \$12 \text{ per T;} \\ 3,000 \times \$12 = \$36,000; \\ \$36,000 \div 2,000 = \$18.$$

$$3-11. 6,000 \text{ t. @ } \$15 \text{ per t;} \\ 6,000 \times \$15 = \$90,000; \\ \$90,000 \div 1,000 = \$90.$$

$$3-6. 2,000 \text{ articles @ } \$6 \text{ per M;} \\ 2,000 \times \$6 = \$12,000; \\ \$12,000 \div 1,000 = \$12.$$

$$3-8. 2,750 \text{ ft. @ } \$100 \text{ per M;} \\ 2,750 \times \$100 = \$275,000; \\ \$275,000 \div 1,000 = \$275.$$

$$3-10. 1,550 \text{ lb. @ } \$20 \text{ per T;} \\ 1,550 \times \$20 = \$31,000; \\ \$31,000 \div 2,000 = \$15.50.$$

$$3-12. 4,000 \text{ kg @ } \$12 \text{ per t;} \\ 4,000 \times \$12 = \$48,000; \\ \$48,000 \div 1,000 = \$48.$$

Review Assignment 11b

1. Division: (g) The reverse of multiplication.

C: (a) Hundred.

Cwt: (d) Hundred pounds.

M: (f) Thousand.

Remainder: (e) A leftover in division.

t: (b) Metric ton.

T: (c) Customary ton.

$$2. a. 1.6 \times 35 = 56 \quad b. 37.5 \div 2.5 = 15 \quad c. 0.12 \times 400 = 48$$

$$3. a. \begin{array}{r} 645 \\ 35 \overline{) 22.505} \\ \underline{210} \\ 150 \\ \underline{140} \\ 105 \\ \underline{105} \\ 0 \end{array} \quad b. \begin{array}{r} 25 \\ 41.3 \overline{) 10.325} \\ \underline{826} \\ 2065 \\ \underline{2065} \\ 0 \end{array}$$

$$c. 645 \text{ bolts @ } \$4.20 \text{ per lb.} \\ 645 \times \$4.20 = \$2,709.00 \\ \$2,709.00 \div 100 = \$27.09$$

$$d. \begin{array}{r} 4.95 \text{ L} \\ 5 \overline{) 24.75 \text{ L}} \\ \underline{20} \\ 47 \\ \underline{45} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

Sections 11-12.

Review Assignment 11b - Part 12a.

Exercises 4-6 (for Review Assignment 11b),
and Exercise 1 (for Part 12a).

$$\begin{array}{r}
 4 \\
 4. \ \$69 \\
 \times 50 \\
 \hline
 \$34.50
 \end{array}
 \qquad
 \begin{array}{r}
 2 \overset{13}{\cancel{3}} \overset{14}{\cancel{4}} \overset{10}{\cancel{0}} \\
 \$34.50 \\
 - 18.95 \\
 \hline
 \$15.55
 \end{array}$$

$$\begin{array}{r}
 5. \ 400 \\
 \times \$65 \\
 \hline
 2000 \\
 2400 \\
 \hline
 \$260.00
 \end{array}
 \qquad
 \begin{array}{r}
 5 \overset{4}{\cancel{5}} \\
 365 \\
 \times \$98 \\
 \hline
 2920 \\
 3285 \\
 \hline
 \$357.70
 \end{array}
 \qquad
 \begin{array}{r}
 \$357.70 \\
 - 260.00 \\
 \hline
 \$97.70
 \end{array}$$

$$\begin{array}{r}
 6. \ \$11.50 \\
 \times 25 \\
 \hline
 5750 \\
 2300 \\
 \hline
 \$287.50
 \end{array}
 \qquad
 \begin{array}{r}
 \$299.00 \\
 + 200.00 \\
 \hline
 \$499.00
 \end{array}
 \qquad
 \begin{array}{r}
 \$19.96 \\
 25 \overline{) \$499.00} \\
 \underline{25} \\
 249 \\
 \underline{225} \\
 240 \\
 \underline{225} \\
 150 \\
 \underline{150} \\
 0
 \end{array}$$

Section 12.

$$\begin{array}{r}
 1. \ \$5.50 \\
 3.50 \\
 + 4.26 \\
 \hline
 \$13.26
 \end{array}
 \qquad
 \begin{array}{r}
 \$4.42 \\
 3 \overline{) \$13.26} \\
 \underline{13.26} \\
 0
 \end{array}
 \qquad
 \begin{array}{r}
 12. \ \$16.20 \\
 15.80 \\
 17.50 \\
 14.40 \\
 + 20.10 \\
 \hline
 \$84.00
 \end{array}$$

$$\begin{array}{r}
 22 \ 2 \\
 3. \ \$45.69 \\
 54.23 \\
 62.78 \\
 + 58.42 \\
 \hline
 \$221.12
 \end{array}
 \qquad
 \begin{array}{r}
 \$55.28 \\
 4 \overline{) \$221.12} \\
 \underline{221.12} \\
 0
 \end{array}$$

Unit 3. Section 12.
Part 12a.
Exercises 1-2.

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Exercise 1
(continued)

$$\begin{array}{l}
 1-4. \quad 10 \text{ L @ } 63\text{¢} = \$6.30 \\
 \quad 10 \text{ L @ } 65\text{¢} = 6.50 \\
 \quad 8 \text{ L @ } 61\text{¢} = 4.88 \\
 \quad 14 \text{ L @ } 59\text{¢} = 8.26 \\
 \quad 40 \text{ L} \quad \quad \$25.94
 \end{array}$$

$$\begin{array}{r}
 \$61.78 = \$618 \\
 42 \overline{) \$25,940.00} \\
 \underline{252} \\
 74 \\
 \underline{42} \\
 320 \\
 \underline{294} \\
 260 \\
 \underline{252} \\
 8
 \end{array}$$

$$\begin{array}{l}
 1-5. \quad 50 \text{ kg @ } \$1.40 = \$70.00 \\
 \quad 30 \text{ kg @ } 1.70 = 51.00 \\
 \quad 20 \text{ kg @ } 1.05 = 21.00 \\
 \quad \quad \quad \$142.00
 \end{array}$$

$$\begin{array}{r}
 \$47.33 \\
 2 \overline{) \$142.00} \\
 \underline{26} \\
 260 \\
 \underline{252} \\
 8
 \end{array}$$

$$\begin{array}{r}
 4132 \\
 1-6. \quad \$1,825.40 \\
 \times \quad \quad 6 \\
 \hline
 \$10,952.40
 \end{array}$$

$$\begin{array}{r}
 2 \\
 1-7. \quad 85 \\
 85 \\
 85 \\
 85 \\
 85 \\
 85 \\
 85 \\
 85
 \end{array}$$

$$\begin{array}{r}
 26 \\
 6 \overline{) 516} \\
 \underline{36} \\
 156 \\
 \underline{156} \\
 0
 \end{array}$$

$$\begin{array}{r}
 21 \\
 2-1. \quad \$1.50 \\
 \times \quad \quad 7 \\
 \hline
 \$10.50 \\
 - 8.70 \\
 \hline
 \$1.80
 \end{array}$$

$$\begin{array}{r}
 21 \\
 \times \quad \quad 6 \\
 \hline
 \$8.70
 \end{array}$$

$$\begin{array}{r}
 21 \\
 86 \\
 86 \\
 86 \\
 86 \\
 86 \\
 86 \\
 86
 \end{array}$$

$$\begin{array}{r}
 14 \\
 2-2. \quad \$6.38 \\
 \times \quad \quad 5 \\
 \hline
 \$31.90 \\
 - 24.70 \\
 \hline
 \$7.20
 \end{array}$$

$$\begin{array}{r}
 21 \\
 \times \quad \quad 5 \\
 \hline
 550 \\
 675 \\
 \hline
 1225
 \end{array}$$

Mary paid \$1.80 for the seventh bag.

The fifth dress cost \$7.20.

$$\begin{array}{r}
 21 \\
 2-3. \quad \$10.00 \\
 \times \quad \quad 5 \\
 \hline
 \$50.00 \\
 - 41.85 \\
 \hline
 \$8.15
 \end{array}$$

$$\begin{array}{r}
 21 \\
 \times \quad \quad 5 \\
 \hline
 825 \\
 11.00 \\
 + 9.50 \\
 \hline
 \$41.85
 \end{array}$$

$$\begin{array}{r}
 21 \\
 2-4. \quad 85 \\
 \times \quad \quad 5 \\
 \hline
 425 \\
 - 336 \\
 \hline
 87
 \end{array}$$

$$\begin{array}{r}
 1 \\
 83 \\
 76 \\
 88 \\
 + 11 \\
 \hline
 338
 \end{array}$$

The most Tim could spend on Friday is \$8.15.

Kay must get an 87 mark on her fifth test.

Section 12.

Review Assignment 12a.

Exercises 1-7.

Unit 3.

71

1. Average: (c) The sum of the numbers divided by the number of items.

Simple average: (b) Any single number that is used to represent a group of numbers.

Weighted average: (a) The sum of the products divided by the sum of the quantities.

2. a. 462 bolts @ \$5.58 per 100 b. $\frac{1324}{6.5} = 0.86060$

$$462 \times \$5.58 = \$2,577.96;$$

$$\$2,577.96 \div 100 = \$25.78.$$

c. $\begin{array}{r} 615 \\ 875L \\ - 326L \\ \hline 549L \end{array}$

3. $\begin{array}{r} 83 \\ 78 \\ 89 \\ 87 \\ 86 \\ + 93 \\ \hline 516 \end{array}$

4. $\begin{array}{r} 40 \text{ lb. @ } \$.95 = \$38.00 \\ 20 \text{ lb. @ } \$1.25 = 25.00 \\ \hline 60 \text{ lb. } \$63.00 \end{array}$

5. $\begin{array}{r} 85\% \\ \times 5 \\ \hline 425\% \\ - 339\% \\ \hline 86\% \end{array}$

6. $\begin{array}{r} 78\% \\ 85\% \\ 92\% \\ + 84\% \\ \hline 339\% \end{array}$

7. $\begin{array}{r} 11.45 \\ \times 50 \\ \hline \$572.50 \end{array}$

8. $\begin{array}{r} \$16.00 \\ \times 40 \\ \hline \$640.00 \\ + 26.50 \\ \hline \$666.50 \end{array}$

Marian must get a score of 86% on her fifth test.

9. $\begin{array}{r} 19.95 \\ \times 50 \\ \hline \$997.50 \\ - 572.50 \\ \hline \$425.00 \end{array}$

10. $\begin{array}{r} 221 \\ \$29.75 \\ \times 30 \\ \hline 892.50 \end{array}$

11. $\begin{array}{r} 23.75 \\ \times 10 \\ \hline 237.50 \end{array}$

12. $\begin{array}{r} 892.50 \\ + 237.50 \\ \hline \$1,130.00 \end{array}$

13. $\begin{array}{r} 1,130.00 \\ - 666.50 \\ \hline \$463.50 \end{array}$

50 pairs.

Unit 3, Section 12.
Part 12 b.
Exercises 3-4.

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$$3-1. \quad \begin{array}{r} 3 \\ 600 \overline{) 1,800} \end{array}$$

$$3-2. \quad \begin{array}{r} 30 \\ 18 \overline{) 540} \end{array}$$

$$3-3. \quad \begin{array}{r} 20 \\ 40 \overline{) 800} \end{array}$$

$$3-4. \quad \begin{array}{r} \$ 120 \\ 60 \overline{) \$ 7,200} \end{array}$$

$$3-5. \quad \begin{array}{r} \$ 6.00 \\ 80 \overline{) \$ 480.00} \end{array}$$

$$3-6. \quad \begin{array}{r} \$ 200 \\ 40 \overline{) \$ 8,000} \end{array}$$

$$4-1. \quad \begin{array}{r} \$ 70 \\ 30 \overline{) \$ 2,100} \end{array}$$

$$b. \quad \begin{array}{r} \$ 80 \\ 40 \overline{) \$ 3,200} \end{array}$$

$$c. \quad \begin{array}{r} \$ 60 \\ 50 \overline{) \$ 3,000} \end{array}$$

$$d. \quad \begin{array}{r} \$ 100 \\ 60 \overline{) \$ 6,000} \end{array}$$

$$4-2. \quad \begin{array}{r} \$ 34 \\ 500 \overline{) \$ 17,000} \end{array}$$

$$b. \quad \begin{array}{r} 13 \\ 2 \overline{) 26} \end{array}$$

$$c. \quad \begin{array}{r} .15 \\ 2000 \overline{) 300.00} \end{array}$$

$$d. \quad \begin{array}{r} 26 \\ 2 \overline{) 52} \end{array}$$

$$4-3. \quad \begin{array}{r} .4 \\ 10 \overline{) 4.0} \end{array}$$

$$b. \quad \begin{array}{r} .8 \\ 9 \overline{) 7.2} \end{array}$$

$$c. \quad \begin{array}{r} 2.7 \\ 8 \overline{) 21.6} \end{array}$$

$$d. \quad \begin{array}{r} 24 \\ 4 \overline{) 96} \end{array}$$

$$4-4. \quad \begin{array}{r} 2. \\ 2 \overline{) 4} \end{array}$$

$$b. \quad \begin{array}{r} 9. \\ .7 \overline{) 6.3} \end{array}$$

$$c. \quad \begin{array}{r} 30. \\ .01 \overline{) .30} \end{array}$$

$$d. \quad \begin{array}{r} .01 \\ 4 \overline{) .04} \end{array}$$

$$5-1. \quad \begin{array}{r} 1044 \\ 2992 \overline{) 312,4000} \\ \underline{2992} \\ 13200 \\ \underline{11968} \\ 12320 \\ \underline{11968} \\ 352 \\ .104 \end{array}$$

$$b. \quad \begin{array}{r} 8191 \\ 9.08 \overline{) 7438000} \\ \underline{7264} \\ 1740 \\ \underline{908} \\ 8320 \\ \underline{8172} \\ 1480 \\ \underline{908} \\ 572 \\ 819 \end{array}$$

$$c. \quad \begin{array}{r} 16109 \\ 0.22 \overline{) 0.354400} \\ \underline{22} \\ 134 \\ \underline{132} \\ 24 \\ \underline{22} \\ 200 \\ \underline{198} \\ 2 \\ 1.611 \end{array}$$

Section 12.
Part 12 b.
Exercises 5-6.

Unit 3.

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5-2. a. $\frac{16,009.00}{2.13} = 7516.43$ b. $\frac{8599}{0.621} = 13847.02$ c. $\frac{342.987}{0.1312} = 2614.23$

16.01 8.6 342.99

5-3. a. $\frac{\$.0348}{504} = \$.000069$ b. $\frac{\$.1258}{304} = \$.000414$ c. $\frac{\$.3777}{235} = \$.001607$

$\$.035$ $\$.126$ $\$.378$

5-4. a. $\frac{2975}{40} = 74.375$ b. $\frac{.503}{510} = .000986$ c. $\frac{.097}{3,500} = .0000277$

2.98 .5 .1

Unit 3.

Section 12.

Part 12b - Preview Assignment 12b.

Exercise 6 (for Part 12b),

and Exercise 1 (for Preview Assignment 12b).

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Exercise 6.
continued.

6.2. a.
$$\begin{array}{r} .035 \\ 11,800 \overline{) 413,000} \\ \underline{35400} \\ 59000 \\ \underline{59000} \\ 0 \end{array}$$
 b.
$$\begin{array}{r} .3667 \\ 2,400 \overline{) 880.0000} \\ \underline{7200} \\ 16000 \\ \underline{14400} \\ 16000 \\ \underline{14400} \\ 16000 \\ \underline{14400} \\ 16000 \\ \underline{14400} \\ 16000 \end{array}$$
 c.
$$\begin{array}{r} .0554 \\ 7,400 \overline{) 410.0000} \\ \underline{37000} \\ 40000 \\ \underline{37000} \\ 30000 \\ \underline{29600} \\ 400 \end{array}$$

6.3. a.
$$\begin{array}{r} .10476 \\ 1200 \overline{) 125,60000} \\ \underline{12000} \\ 5600 \\ \underline{4800} \\ 8000 \\ \underline{7200} \\ 8000 \\ \underline{7200} \\ 8000 \\ \underline{7200} \\ 8000 \end{array}$$
 b.
$$\begin{array}{r} .25609 \\ 8,200 \overline{) 2,100,00000} \\ \underline{16400} \\ 46000 \\ \underline{41000} \\ 50000 \\ \underline{49200} \\ 80000 \\ \underline{73800} \\ 6200 \end{array}$$

c.
$$\begin{array}{r} .00025 \\ 76,520,000 \overline{) 191,300,0000} \\ \underline{153,040,0000} \\ 38,260,0000 \\ \underline{38,260,0000} \\ 0 \end{array}$$

Preview Assignment 12b (continued) 1. a. $0.35 \times 600 = 210$ b. $127 - 42 = 85$ c. $245 \div 3.5 = 70$

Section 12.
Review Assignment 12 b.
Exercises 2-5.

Unit 3.

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2. a. $9.64 \times 0.08 = .7712$

b. $36,600 \times 2,030 = 621,800$

c. $15.4 \div 43 = 0.3581$

d. $0.0242 \times 4.5 = 0.1089$

e. 265 lb. of feed @ \$3.20 per cwt;
 $265 \times \$3.20 = \848.00
 $\$848.00 \div 100 = \8.48

f. $.7619 \div 21 = .0363$

3. $78\% + 85\% = 163\%$
 $93\% \times 4 = 372\%$
 $163\% + 372\% = 535\%$
 $535\% - 252\% = 283\%$

g. $1.5m = 15m$
 $50cm = .5m$
 $\pm 5cm = .05m$
 $205m$

Jay must get 88% on his fourth test.

4. $30 \text{ lbs.} @ \$.80 = \24.00
 $15 \text{ lbs.} @ \$1.20 = 18.00$
 $5 \text{ lbs.} @ \$1.50 = 7.50$
 $50 \text{ lbs.} \$3.50 = \175.00
 $\$3.50 \div 50 \text{ lbs.} = \$.07 \text{ lb.}$

5. $\$22.50 \times 40 = \900.00

6. $\$29.50 \times 6 = \177.00

7. $\$37.50 \times 34 = \1275.00

8. $\$36.30 \times 40 = \1452.00

$\$1,275.00 + \$177.00 = \$1,452.00$

$\$1,452.00 - \$900.00 = \$552.00$

$\$552.00 \div 40 = \13.80

Unit 3. Section 12.
Review Assignment 12b.
Exercises 6-10.

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Review Assignment 12b (continued)

6.

$\begin{array}{r} 2.5 \\ 100 \overline{) 250.0} \\ \underline{200} \\ 500 \\ \underline{500} \\ 0 \end{array}$	$\begin{array}{r} \$35. \\ \times 2.5 \\ \hline 175 \\ 70 \\ \hline \$87.50 \end{array}$	$\begin{array}{r} \$87.50 \\ + 7.50 \\ \hline \$95.00 \end{array}$	$\begin{array}{r} \$.50 \\ 250 \overline{) \$125.00} \\ \underline{12500} \\ 0 \end{array}$
--	--	--	--

7.

$\begin{array}{r} \$.621 \\ 30 \overline{) \$18.650} \\ \underline{180} \\ 650 \\ \underline{600} \\ 500 \\ \underline{300} \\ 200 \end{array}$	$\begin{array}{r} \$18.65 \\ - .62 \\ \hline \$18.07 \end{array}$	$\begin{array}{r} \$.83 \\ 29 \overline{) \$24.07} \\ \underline{232} \\ 87 \\ \underline{87} \\ 0 \end{array}$
--	---	--

8.

$\begin{array}{r} \$2.00 \\ 500 \overline{) \$1.00} \\ \underline{500} \\ 0 \end{array}$	$\begin{array}{r} \$1.80 \\ 750 \overline{) \$1.350} \\ \underline{750} \\ 600 \\ \underline{600} \\ 0 \end{array}$	The 750 gram box is cheaper by the kilogram by 20¢.
--	---	---

9. 20 dozen cans, because:

$\begin{array}{r} \$2.10 \\ \times 20 \\ \hline \$42.00 \end{array}$	$\begin{array}{r} \$.75 \\ \times 80 \\ \hline \$60.00 \end{array}$	$\begin{array}{r} \$60.00 \\ - 42.00 \\ \hline \$18.00 \end{array}$
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<p>10. <i>Maria Kirby</i> Reconciliation Statement March 31, 1980</p>	
Checkbook balance: \$1,340.85	Bank statement balance: \$1,236.45
Less:	Less outstanding checks:
Check not recorded 39.70	#71 \$17.80
	#74 32.10
	#75 27.60
	<u>77.50</u>
	Sub-total \$1,158.95
	Add: Deposit not recorded 142.20
Correct checkbook balance \$1,301.15	Available bank balance \$1,301.15

Section 13.

Parts 13a-13b.

Exercise 1 (for Part 13a),
and Exercise 2 (for Part 13b).

Unit 4, Section 13.

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$$\begin{array}{r}
 1. \frac{3}{4} \text{ lb. nails @ } \$1.40 = \$1.05 \\
 \frac{2}{3} \text{ dozen fuses @ } 1.50 = 1.00 \\
 \frac{5}{6} \text{ yard gutter @ } 1.08 = .90 \\
 \hline
 \$2.95
 \end{array}$$

$$\$20.00 - \$2.95 = \$17.05$$

$$\begin{array}{r}
 1-2. \frac{1}{2} \text{ dozen cards @ } \$3.50 = \$1.75 \\
 \frac{1}{3} \text{ box candles @ } 1.53 = .51 \\
 \frac{3}{5} \text{ yards ribbon @ } 2.25 = 1.35 \\
 \hline
 \$3.61
 \end{array}$$

$$\begin{array}{l}
 3. a. 27 \text{ in.} = \frac{3}{4} \text{ yd. @ } \$1.68 \text{ yd.} = \$1.26 \\
 b. \frac{3}{4} \text{ yd. @ } \$1.68 \text{ yd.} = \$1.26
 \end{array}$$

$$\begin{array}{l}
 4. a. 8 \text{ tomatoes} = \frac{2}{3} \text{ doz.} \\
 b. \frac{2}{3} \text{ doz. @ } \$1.80 \text{ doz.} = \$1.20
 \end{array}$$

$$\begin{array}{l}
 5. a. 14 \text{ oz.} = \frac{7}{8} \text{ lb.} \\
 b. \frac{7}{8} \text{ lb. @ } \$1.80 \text{ lb.} = \$1.58 \text{ lb.}
 \end{array}$$

$$\begin{array}{r}
 6. 6 \text{ oz. liver @ } \$1.40 \text{ lb.} = .53 \\
 10 \text{ oz. bacon @ } 1.76 \text{ lb.} = 1.10 \\
 8 \text{ melons @ } 3.27 \text{ doz.} = 2.18 \\
 \hline
 \$3.81
 \end{array}$$

$$\begin{array}{r}
 7. 27 \text{ in. wire @ } \$1.59 \text{ yd.} = \$1.20 \\
 8 \text{ bolts @ } \$1.85 \text{ doz.} = .57 \\
 60 \text{ ft. wire @ } \$14 \text{ per 100 ft.} = 8.40 \\
 \hline
 \$10.17
 \end{array}$$

1-1. The whole numbers in Problem 1 are c ($\frac{8}{4}=2$), d ($\frac{12}{3}=4$), h ($\frac{6}{1}=6$), i ($\frac{3}{1}=3$), l ($\frac{4}{4}=1$), m ($\frac{0}{4}=0$), o ($\frac{8}{8}=1$), and p ($\frac{1}{1}=1$).

1-2. The fractional numbers in Problem 1 are a ($\frac{5}{12}$), b ($\frac{9}{5}$), e ($\frac{8}{3}$), f ($\frac{5}{8}$), g ($\frac{7}{8}$), j ($\frac{3}{2}$), k ($\frac{7}{4}$), and n ($\frac{4}{5}$).

1-3. The names for the number 1 in Problem 1 are l ($\frac{4}{4}=1$), o ($\frac{8}{8}=1$), and p ($\frac{1}{1}=1$).

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3-1. a. $15 \div 5 = \frac{15}{5}$ b. $8 \div 8 = \frac{8}{8}$ c. $9 \div 7 = \frac{9}{7}$ d. $32 \div 35 = \frac{32}{35}$
 e. $5 \div 6 = \frac{5}{6}$ f. $48 \div 36 = \frac{48}{36}$ g. $7 \div 9 = \frac{7}{9}$ h. $120 \div 120 = \frac{120}{120}$

3-2. a. $\frac{5}{8} = 5 \div 8$ b. $\frac{385}{462} = 385 \div 462$ c. $\frac{9}{7} = 9 \div 7$
 d. $\frac{91}{90} = 91 \div 90$ e. $\frac{8}{4} = 8 \div 4$ f. $\frac{90}{91} = 90 \div 91$ g. $\frac{6}{6} = 6 \div 6$
 h. $\frac{365}{30} = 365 \div 30$ i. $\frac{15}{16} = 15 \div 16$ j. $\frac{1090}{545} = 1,090 \div 545$

Review Assignment 13b:

1. common fraction: (b) A quotient that is not a whole number.
 denominator: (c) The numeral below the line in a fraction.
 fraction: (d) A name for the fractional number.
 fractional number: (b) A quotient that is not a whole number.
 fraction: (c) The numeral below the line in a fraction.
 numerator: (a) The numeral above the line in a fraction.

2. a. 440 lb. mail @ \$81.15 wt.;
 $440 \times \$81.15 = \$35,706.00$
 $\$35,706.00 \div 100 = \357.06

b. $.7419 = .742$

$$\begin{array}{r} 31 \overline{) 23.0000} \\ \underline{217} \\ 130 \end{array}$$

c.
$$\begin{array}{r} 0.007 \\ \times 46.7 \\ \hline 49 \\ 42 \\ 28 \\ \hline 0.3269 \end{array}$$

d.
$$\begin{array}{r} 135 \\ 3400 \overline{) 459000} \\ \underline{3400} \\ 11900 \\ \underline{10200} \\ 17000 \\ \underline{17000} \end{array}$$

$$\begin{array}{r} 130 \\ 124 \\ \hline 60 \\ 31 \\ \hline 290 \\ 279 \\ \hline 11 \end{array}$$

e.
$$\begin{array}{r} 11 \frac{812}{10} \\ + 2480 \text{ KL} \\ - 968.5 \text{ KL} \\ \hline 2745 \text{ KL} \end{array}$$

3.
$$\begin{array}{r} 14 \text{ oz. meat @ } \$1.07 \text{ lb.} = \$1.94 \\ 12 \text{ oz. cheese @ } 1.95 \text{ lb.} = 1.46 \\ 5 \text{ grapefruit @ } 2.40 \text{ doz.} = 1.00 \\ \hline \$3.40 \end{array}$$

Section 13.
Review Assignment 13b.
Exercises 4-10.

4. $\begin{array}{r} \$85.00 \\ \times 4 \\ \hline \$340.00 \\ - 251.50 \\ \hline \$88.50 \end{array}$

The most the Belcons can spend is \$88.50.

5. $\begin{array}{r} \$3.50 \\ \times 50 \\ \hline \$175.00 \\ - 17.50 \\ \hline \$157.50 \\ + 140.00 \\ \hline \$297.50 \end{array}$

6. $\begin{array}{r} \$11.20 \\ \times 5 \\ \hline \$56.00 \end{array}$

7. $\begin{array}{r} \$4.50 \\ \times 20 \\ \hline \$90.00 \end{array}$

8. $\begin{array}{l} 60 \text{ doz. eggs @ } \$.91 = \$54.60 \\ 50 \text{ doz. eggs @ } .93 = 46.50 \\ 40 \text{ doz. eggs @ } .92 = 36.80 \\ 70 \text{ doz. eggs @ } .87 = +60.90 \\ \hline \$198.80 \end{array}$

9. $\begin{array}{r} \$52.20 \\ \times 4,166\bar{6} \\ \hline \$217.50 \end{array}$

Teresa Miller	
June 30, 1981	
Reconciliation Statement	
Checkbook balance: \$861.15	Bank statement balance: \$784.33
Less:	Less: Outstanding checks
Amount of check not recorded 25.48	#214 \$15.63
	#219 31.88
	47.51
	Sub-total 736.82
	Add: Deposit not recorded 98.85
Correct checkbook balance: \$835.67	Available bank balance \$835.67

Unit 4.

Section 13.

Part 13c.

Exercises 4-5.

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4-1. The fractions whose numbers are less than 1 are $a(\frac{3}{4})$, $b(\frac{5}{8})$, $c(\frac{2}{5})$, $d(\frac{9}{10})$, $g(\frac{5}{8})$, $m(\frac{3}{8})$, and $n(\frac{1}{5})$.

4-2. a. The numbers in Problem 1 that name the number 1 are $h(\frac{7}{7}=1)$, $i(\frac{3}{3}=1)$, and $p(\frac{1}{1}=1)$.

b. The numbers in Problem 1 that are greater than 1 are $e(\frac{5}{2}=2\frac{1}{2})$, $f(\frac{10}{4}=2\frac{1}{2})$, $j(\frac{15}{4}=3\frac{3}{4})$, $k(\frac{8}{3}=2\frac{2}{3})$, $l(\frac{5}{1}=5)$ and $o(\frac{8}{4}=2)$.

c. The whole numbers in Problem 1 that are greater than 1 are $j(\frac{15}{4}=3)$, $l(\frac{5}{1}=5)$, and $o(\frac{8}{4}=2)$.

4-3. a. 1 unit = 6 sixths b. 2 units = 6 thirds
c. 4 units = 32 eighths d. 5 units = 50 tenths
e. 12 fourths = 3 units f. 4 units = 8 halves
g. 10 fifths = 2 units h. 24 sixths = 4 units

4-4. a. 12 twelfths = 1 unit b. 12 fourths = 3 units
c. 10 fifths = 2 units d. 12 thirds = 4 units
e. 5 fifths = 1 unit f. 16 fourths = 4 units
g. 20 fourths = 5 units h. 6 thirds = 2 units
i. 32 eighths = 4 units j. 7 sevenths = 1 unit
k. 24 eighths = 3 units l. 10 tenths = 1 unit

5-1. a. $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$ b. $\frac{1}{6}$ of $\frac{1}{3} = \frac{1}{18}$ c. $\frac{1}{3} \times \frac{1}{8} = \frac{1}{24}$

5-2. a. $\frac{2}{3}$ of $\frac{4}{8} = \frac{8}{24} = \frac{1}{3}$ b. $\frac{3}{8} \times \frac{5}{8} = \frac{15}{64}$ c. $\frac{7}{8} \times \frac{5}{6} = \frac{35}{48}$

5-3. a. $\frac{1}{2} \times \frac{2}{2} = \frac{2}{4} = \frac{1}{2}$ b. $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6} = \frac{1}{2}$ c. $\frac{1}{2} \times \frac{4}{4} = \frac{4}{8} = \frac{1}{2}$

5-4. a. $\frac{2}{3} \times \frac{2}{2} = \frac{4}{6} = \frac{2}{3}$ b. $\frac{1}{3} \times \frac{3}{3} = \frac{3}{9} = \frac{1}{3}$ c. $\frac{3}{8} \times \frac{3}{3} = \frac{9}{24} = \frac{3}{8}$

5-5. a. $\frac{5}{1} \times \frac{3}{3} = \frac{15}{3} = 5$ b. $\frac{3}{1} \times \frac{5}{5} = \frac{15}{5} = 3$ c. $\frac{6}{1} \times \frac{4}{4} = \frac{24}{4} = 6$

5-6.

Section 13.

Part 13c - Review Assignment 13c.

Exercise 6 (for Part 13c),

and Exercise 1 (for Review Assignment 13c).

5-1. a. $\frac{3}{4} \times 2 = \frac{6}{4}$; $\frac{3}{4} \times 3 = \frac{9}{12}$; $\frac{3}{4} \times 4 = \frac{12}{16}$; $\frac{3}{4} \times 5 = \frac{15}{20}$
 b. $\frac{2}{5} \times 2 = \frac{4}{10}$; $\frac{2}{5} \times 3 = \frac{6}{15}$; $\frac{2}{5} \times 4 = \frac{8}{20}$; $\frac{2}{5} \times 5 = \frac{10}{25}$
 c. $\frac{6}{5} \times 2 = \frac{12}{10}$; $\frac{6}{5} \times 3 = \frac{18}{15}$; $\frac{6}{5} \times 4 = \frac{24}{20}$; $\frac{6}{5} \times 5 = \frac{30}{25}$
 d. $\frac{3}{8} \times 2 = \frac{6}{16}$; $\frac{3}{8} \times 3 = \frac{9}{24}$; $\frac{3}{8} \times 4 = \frac{12}{32}$; $\frac{3}{8} \times 5 = \frac{15}{40}$
 e. $\frac{1}{1} \times 2 = \frac{2}{2}$; $\frac{1}{1} \times 3 = \frac{3}{3}$; $\frac{1}{1} \times 4 = \frac{4}{4}$; $\frac{1}{1} \times 5 = \frac{5}{5}$
 f. $\frac{2}{1} \times 2 = \frac{4}{2}$; $\frac{2}{1} \times 3 = \frac{6}{3}$; $\frac{2}{1} \times 4 = \frac{8}{4}$; $\frac{2}{1} \times 5 = \frac{10}{5}$
 g. $\frac{4}{1} \times 2 = \frac{8}{2}$; $\frac{4}{1} \times 3 = \frac{12}{3}$; $\frac{4}{1} \times 4 = \frac{16}{4}$; $\frac{4}{1} \times 5 = \frac{20}{5}$
 h. $\frac{3}{10} \times 2 = \frac{6}{20}$; $\frac{3}{10} \times 3 = \frac{9}{30}$; $\frac{3}{10} \times 4 = \frac{12}{40}$; $\frac{3}{10} \times 5 = \frac{15}{50}$

6-2. a. $\frac{3}{18} = \frac{3 \div 3}{18 \div 3} = \frac{1}{6}$ b. $\frac{15}{35} = \frac{15 \div 5}{35 \div 5} = \frac{3}{7}$
 c. $\frac{42}{48} = \frac{42 \div 6}{48 \div 6} = \frac{7}{8}$ d. $\frac{15}{10} = \frac{15 \div 5}{10 \div 5} = \frac{3}{2} = 1\frac{1}{2}$ e. $\frac{18}{6} = \frac{18 \div 6}{6 \div 6} = \frac{3}{1} = 3$

6-3. a. $\frac{90}{45} = \frac{90 \div 45}{45 \div 45} = \frac{2}{1}$ b. $\frac{90}{45} = \frac{90 \div 9}{45 \div 9} = \frac{10}{5}$
 c. $\frac{90}{45} = \frac{90 \times 2}{45 \times 2} = \frac{180}{90}$ d. $\frac{90}{45} = \frac{90 \div 3}{45 \div 3} = \frac{30}{15}$
 e. $\frac{90}{45} = \frac{90 \times 4}{45 \times 4} = \frac{360}{180}$ f. $\frac{90}{45} = \frac{90 \div 15}{45 \div 15} = \frac{6}{3}$
 g. $\frac{90}{45} = \frac{90 \div 5}{45 \div 5} = \frac{18}{9}$ h. $\frac{90}{45} = \frac{90 \times 3}{45 \times 3} = \frac{270}{135}$

1. a. 13,250 bricks @ \$58.40 M; b. $.7058 = .706$

$13,250 \times \$58.40 = \$773,800.00$

$\$773,800.00 \div 1.000 = \773.80

$\frac{3}{2}$
 $\begin{array}{r} 10,400 \\ \times 1,850 \\ \hline \end{array}$

$\begin{array}{r} 52000 \\ 83200 \\ 0400 \\ \hline 9,240,000 \end{array}$

$\frac{5}{8} \times \frac{1}{2}$
 $\begin{array}{r} 208.3 \\ \times 6.97 \\ \hline \end{array}$

$\begin{array}{r} 14581 \\ 18747 \\ 12498 \\ \hline 1451.851 \end{array}$

$17 \overline{) 12.0000}$

$\begin{array}{r} 119 \\ 100 \\ 85 \\ \hline 150 \\ 136 \\ \hline 14 \end{array}$

Unit 4.

Section 13.

Review Assignment 13c - Part 13d.

Exercises 1-6 (for Review Assignment 13c),
and Exercise 7 (for Part 13d).

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Review Assignment 13c (continued)
Exercises 1-6 (continued).

$$\begin{array}{r} 309.2 \\ 11.6 \overline{) 3586.72} \\ \underline{348} \\ 1067 \\ \underline{1044} \\ 232 \\ \underline{232} \\ 0 \end{array}$$

2. $10.3 \times 40 = 41.2$

$$\begin{array}{r} 3. \quad \$75.00 \quad \$571.27 \\ + 542.87 \quad - 571.12 \\ \hline \$617.87 \quad \$.15 \\ - 46.75 \quad \text{Overs by } 15\text{¢} \\ \hline \$571.12 \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 64 \\ \$6.85 \\ \times 80 \\ \hline \$548.00 \end{array} \quad \begin{array}{r} 163 \\ \$11.95 \\ \times 71 \\ \hline 1195 \\ 8365 \\ \hline \$848.45 \end{array} \quad \begin{array}{r} 84 \\ \$8.95 \\ \times 9 \\ \hline \$80.55 \end{array} \quad \begin{array}{r} \$848.45 \\ + 80.55 \\ \hline \$929.00 \end{array}$$

$$\begin{array}{r} \$11.61 \\ 80 \overline{) \$929.00} \\ \underline{800} \\ 129 \\ \underline{120} \\ 90 \\ \underline{80} \\ 100 \\ \underline{80} \\ 20 \\ \underline{20} \\ 0 \end{array} \quad \begin{array}{r} \$848.45 \\ - 548.00 \\ \hline \$300.45 \end{array} \quad \begin{array}{r} \$929.00 \\ - 548.00 \\ \hline \$381.00 \end{array} \quad \begin{array}{r} \$4.76 \\ 80 \overline{) \$381.00} \\ \underline{320} \\ 61 \\ \underline{60} \\ 10 \\ \underline{80} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

$$\begin{array}{r} 5. \quad \begin{array}{r} 111 \\ \$17,980 \\ + 14,630 \\ \hline \$32,610 \end{array} \quad \begin{array}{r} 511 \\ \$32,810 \\ - 22,340 \\ \hline \$10,270 \end{array} \end{array}$$

$$\begin{array}{r} \$19,140 \\ - 10,270 \\ \hline \$8,870 \end{array}$$

$$\begin{array}{r} 6. \quad \begin{array}{r} 32 \text{ cm} \\ 50 \text{ cm} \\ 125 \text{ cm} \\ + 180 \text{ cm} \\ \hline 387 \text{ cm} \end{array} \quad \begin{array}{r} \$5.50 \text{ m} \\ \times 3.87 \\ \hline 3850 \\ 4400 \\ 1650 \\ \hline \$21,2850 \\ = \$21.29 \end{array}$$

$$\begin{array}{l} 7-1. \quad \frac{6}{10} = \frac{6 \div 2}{10 \div 2} = \frac{3}{5} \\ \frac{5}{20} = \frac{5 \div 5}{20 \div 5} = \frac{1}{4} \\ 7-2. \quad \frac{10}{15} = \frac{10 \div 5}{15 \div 5} = \frac{2}{3} \\ \frac{20}{24} = \frac{20 \div 4}{24 \div 4} = \frac{5}{6} \\ 7-3. \quad \frac{12}{18} = \frac{12 \div 6}{18 \div 6} = \frac{2}{3} \\ \frac{9}{21} = \frac{9 \div 3}{21 \div 3} = \frac{3}{7} \\ 7-4. \quad \frac{18}{20} = \frac{18 \div 2}{20 \div 2} = \frac{9}{10} \\ \frac{5}{25} = \frac{5 \div 5}{25 \div 5} = \frac{1}{5} \end{array}$$

$$\begin{array}{l} \frac{7}{21} = \frac{7 \div 7}{21 \div 7} = \frac{1}{3} \\ \frac{27}{33} = \frac{27 \div 3}{33 \div 3} = \frac{9}{11} \\ \frac{15}{18} = \frac{15 \div 3}{18 \div 3} = \frac{5}{6} \\ \frac{18}{27} = \frac{18 \div 9}{27 \div 9} = \frac{2}{3} \\ \frac{8}{16} = \frac{8 \div 8}{16 \div 8} = \frac{1}{2} \\ \frac{27}{36} = \frac{27 \div 9}{36 \div 9} = \frac{3}{4} \\ \frac{6}{18} = \frac{6 \div 6}{18 \div 6} = \frac{1}{3} \\ \frac{25}{30} = \frac{25 \div 5}{30 \div 5} = \frac{5}{6} \end{array}$$

Section 13.
Part 13 d.
Exercises 8-11.

Unit 4,

83

2-1. a. $\frac{1}{3} \times \frac{2}{4} = \frac{1}{6}$ b. $\frac{1}{5} \times \frac{3}{16} = \frac{1}{16}$ c. $\frac{1}{5} \times \frac{2}{3} = \frac{2}{15}$
 2-2. a. $\frac{1}{3}$ of $\frac{4}{5} = \frac{4}{15}$ b. $\frac{1}{5}$ of $\frac{8}{9} = \frac{8}{45}$ c. $\frac{12}{25} \times \frac{1}{4} = \frac{3}{25}$
 2-3. a. $\frac{1}{9} \times \frac{2}{3} = \frac{2}{27}$ b. $\frac{1}{2}$ of $\frac{15}{16} = \frac{15}{32}$ c. $\frac{12}{25} \times \frac{15}{2} = 1$
 2-4. a. $\frac{1}{4} \times \frac{4}{1} = 1$ b. $\frac{3}{4} \times \frac{5}{8} = \frac{15}{32}$ c. $\frac{15}{8} \times \frac{8}{15} = 1$
 2-5. a. $\frac{15}{2} \times \frac{2}{15} = 1$ b. $\frac{21}{3} \times \frac{3}{21} = 1$ c. $\frac{14}{3}$ of $\frac{3}{4} = \frac{7}{2}$

7-1. a. $\frac{1}{24} \times \frac{3}{4} = \frac{1}{32}$ b. $\frac{2}{27} \times \frac{4}{15} = \frac{8}{405}$
 7-2. a. $\frac{1}{12}$ of $\frac{7}{4} = \frac{7}{48}$ b. $\frac{3}{18}$ of $\frac{56}{7} = \frac{28}{9}$
 7-3. a. $\frac{1}{14} \times \frac{426}{55} = \frac{18}{55}$ b. $\frac{8}{14} \times \frac{264}{49} = \frac{32}{49}$
 7-4. a. $\frac{1}{18} \times \frac{11648}{381} = \frac{8}{27}$ b. $\frac{1}{18} \times \frac{7447}{68} = \frac{28}{81}$
 7-5. a. $\frac{1545}{28} \times \frac{28}{1} \times \frac{2441}{5} = \frac{1}{2}$ b. $\frac{5}{3} \times \frac{1}{1} \times \frac{387}{24} = \frac{196}{3} = 65\frac{1}{3}$

10-1. $\frac{5}{3} = 1\frac{2}{3}$ 10-2. $\frac{7}{4} = 1\frac{3}{4}$
 10-3. $\frac{9}{5} = 1\frac{4}{5}$ 10-4. $\frac{25}{8} = 3\frac{1}{8}$
 10-5. $\frac{23}{5} = 4\frac{3}{5}$ 10-6. $\frac{6}{6} = 1$
 10-7. $\frac{16}{4} = 4$ 10-8. $\frac{27}{3} = 9$
 10-9. $\frac{6}{4} = 1\frac{1}{2}$ 10-10. $\frac{10}{8} = 1\frac{1}{4}$
 10-11. $\frac{20}{6} = 3\frac{1}{3}$ 10-12. $\frac{26}{8} = 3\frac{1}{4}$

1-1. a. $44 \times \frac{3}{4} = 33$ b. $27 \times \frac{2}{3} = 18$
 c. $\frac{3}{8} \times 24 = 9$ d. $\frac{3}{4} \times 36 = 27$
 1-2. a. $\frac{3}{4}$ of $80 = 60$ b. $4 \times \frac{5}{24} = \frac{5}{6}$
 c. $5 \times \frac{4}{25} = \frac{4}{5}$ d. $\frac{2}{15} \times 3 = \frac{2}{5}$
 1-3. a. $4 \times \frac{3}{8} = \frac{3}{2}$ b. $3 \times \frac{7}{9} = \frac{7}{3} = 2\frac{1}{3}$
 c. $\frac{11}{12} \times 6 = 5\frac{1}{2}$ d. $\frac{8}{15} \times 5 = \frac{8}{3} = 2\frac{2}{3}$
 1-4. a. $\frac{2}{3} \times 4 = 2\frac{2}{3}$ b. $\frac{1}{4}$ of $9 = \frac{9}{4} = 2\frac{1}{4}$
 c. $\frac{3}{4}$ of $7 = \frac{21}{4} = 5\frac{1}{4}$ d. $\frac{1}{32} \times 24 = \frac{3}{4}$
 1-5. a. $\frac{1}{12}$ of $8 = \frac{2}{3}$ b. $\frac{1}{16}$ of $6 = \frac{3}{8}$
 c. $\frac{4}{9} \times 12 = 5\frac{1}{3}$ d. $\frac{5}{12} \times 10 = 4\frac{1}{6}$

Unit 4. Section 13.

Review Assignment 13d.
Exercises 1-2.

84

Percent
Assign. 13d.

1. equivalent fractions: (e) Fractions that name the same number.

greatest common factor: (f) Largest number that will divide the terms without a remainder.

improper fractions: (d) Numerator equal to or larger than denominator.

lowest terms: (b) Terms divisible only by 1.

mixed number: (g) A whole number and a fraction.

proper fraction: (a) Numerator smaller than denominator.

terms: (c) Numerator and denominator.

2. a. 28,800 ft. lumber @ \$145 m; b. $16 \times .75 = 12$

$$28,800 \times \$145 = \$4,176,000;$$

$$\$4,176,000 \div 1,300 = \$4,176;$$

c. $\frac{\$545}{12} = \55

 $\frac{1}{2} \pm$

d. 13.4

$$\times 4.06$$

$$\hline 804$$

$$536$$

$$\hline 54404$$

e.

$$\begin{array}{r} 406 \\ 2,080 \overline{) 84,4480} \end{array}$$

$$\hline 8320$$

$$12480$$

$$\hline 12480$$

$$12 \overline{) \$6.550}$$

$$\hline 60$$

$$55$$

$$\hline 48$$

$$70$$

$$\hline 60$$

$$10$$

f. $1.5 \text{ m} = 1.5 \text{ m}$

$$50 \text{ cm} = .5 \text{ m}$$

$$+ 750 \text{ mm} = + .7 \text{ m}$$

$$\hline 2.7 \text{ m}$$

Section 13.
 Review Assignment 13d. Part 13e,
 Exercises 3-6. (2-1-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100)

Unit 4.

85

3. John Eckert Reconciliation Statement June 1, 1981	
Checkbook balance: \$681.42	Bank statement balance: \$785.22
Less:	Less: Outstanding checks
Service charge 1.95	#158 \$ 8.29
	#159 69.43
	#160 28.03
	105.75
Correct checkbook balance: \$679.47	Available bank balance: \$679.47

1 3 \$ 31.25	4 1 2 \$ 69.50	4 \$ 55.00	\$ 3,614.00
X 60	X 52	X 8	+ 440.00
\$1,875.00	1,390.00	\$ 440.00	\$ 4,054.00
	34750		- 1,875.00
	\$3,614.00		\$ 2,179.00

2 \$11.50	3 15 240	\$ 172.50	\$ 1.202
X 15	X 16 -20	+ 92.00	220) \$264.500
5750	90 220	\$ 264.50	220
1150	15		445
\$172.50	240		440
			500
		\$1.20	440
			60

5. Checkbook balance: \$788.41
Add:
Amount on check (too small) \$ 3.60
Deposit not recorded 49.95 53.55
Correct checkbook balance: \$841.96

86

12-1. a. $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$ b. $\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$ c. $\frac{5}{9} + \frac{2}{9} = \frac{7}{9}$ d. $\frac{2}{15} + \frac{11}{15} = \frac{13}{15}$
 e. $\frac{1}{8} + \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$ f. $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$ g. $\frac{1}{15} + \frac{2}{15} = \frac{3}{15} = \frac{1}{5}$ h. $\frac{2}{12} + \frac{2}{12} = \frac{4}{12} = \frac{1}{3}$
 i. $\frac{3}{8} + \frac{3}{8} = \frac{6}{8} = \frac{3}{4}$ j. $\frac{2}{9} + \frac{4}{9} = \frac{6}{9} = \frac{2}{3}$ k. $\frac{3}{10} + \frac{1}{10} = \frac{4}{10} = \frac{2}{5}$ l. $\frac{8}{15} + \frac{2}{15} = \frac{10}{15} = \frac{2}{3}$
 m. $\frac{3}{5} + \frac{3}{5} = \frac{6}{5} = 1\frac{1}{5}$ n. $\frac{5}{7} + \frac{4}{7} = \frac{9}{7} = 1\frac{2}{7}$ o. $\frac{2}{3} + \frac{2}{3} = \frac{4}{3} = 1\frac{1}{3}$ p. $\frac{3}{5} + \frac{4}{5} = \frac{7}{5} = 1\frac{2}{5}$
 q. $\frac{3}{4} + \frac{3}{4} = \frac{6}{4} = 1\frac{1}{2}$ r. $\frac{5}{6} + \frac{3}{6} = \frac{8}{6} = 1\frac{1}{3}$ s. $\frac{3}{8} + \frac{7}{8} = \frac{10}{8} = 1\frac{1}{4}$ t. $\frac{11}{12} + \frac{5}{12} = \frac{16}{12} = 1\frac{1}{3}$

12-2. a. $\frac{6}{7} - \frac{2}{7} = \frac{4}{7}$ b. $\frac{7}{9} - \frac{5}{9} = \frac{2}{9}$ c. $\frac{7}{10} - \frac{4}{10} = \frac{3}{10}$
 d. $\frac{6}{7} - \frac{3}{7} = \frac{3}{7}$ e. $\frac{7}{9} - \frac{4}{9} = \frac{3}{9} = \frac{1}{3}$ f. $\frac{11}{12} - \frac{5}{12} = \frac{6}{12} = \frac{1}{2}$
 g. $\frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$ h. $\frac{11}{12} - \frac{7}{12} = \frac{4}{12} = \frac{1}{3}$ i. $\frac{11}{16} - \frac{7}{16} = \frac{4}{16} = \frac{1}{4}$
 j. $\frac{5}{8} - \frac{3}{8} = \frac{2}{8} = \frac{1}{4}$ k. $\frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$ l. $\frac{7}{8} - \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$
 m. $\frac{9}{10} - \frac{5}{10} = \frac{4}{10} = \frac{2}{5}$ n. $\frac{11}{16} - \frac{5}{16} = \frac{6}{16} = \frac{3}{8}$ o. $\frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$

13-1. a. $\frac{1}{2} = \frac{4}{8}$ b. $\frac{3}{4} = \frac{9}{12}$ c. $\frac{1}{4} = \frac{5}{20}$
 d. $\frac{2}{3} = \frac{10}{15}$ e. $\frac{3}{8} = \frac{9}{24}$ f. $\frac{4}{5} = \frac{16}{20}$
 g. $\frac{5}{6} = \frac{20}{24}$ h. $\frac{3}{10} = \frac{6}{20}$ i. $\frac{5}{8} = \frac{10}{16}$
 j. $\frac{2}{3} = \frac{6}{9}$ k. $\frac{3}{4} = \frac{12}{16}$ l. $\frac{5}{6} = \frac{15}{18}$

13-2. a. $\frac{1}{2} = \frac{6}{12}$ b. $\frac{2}{3} = \frac{8}{12}$ c. $\frac{3}{4} = \frac{9}{12}$ d. $\frac{5}{6} = \frac{10}{12}$
 e. $\frac{1}{3} = \frac{4}{12}$ f. $\frac{2}{5} = \frac{8}{20}$ g. $\frac{1}{2} = \frac{10}{20}$ h. $\frac{3}{4} = \frac{15}{20}$
 i. $\frac{1}{8} = \frac{3}{24}$ j. $\frac{5}{6} = \frac{20}{24}$ k. $\frac{3}{4} = \frac{18}{24}$ l. $\frac{7}{12} = \frac{14}{24}$
 m. $\frac{1}{4} = \frac{9}{36}$ n. $\frac{1}{9} = \frac{4}{36}$ o. $\frac{2}{3} = \frac{24}{36}$ p. $\frac{5}{12} = \frac{15}{36}$

14-1. a. $\frac{3}{8}, \frac{1}{2}, 8$ b. $\frac{3}{4}, \frac{5}{12}, 12$ c. $\frac{2}{16}, \frac{3}{8}, 16$
 d. $\frac{1}{5}, \frac{2}{3}, 24$ e. $\frac{3}{4}, \frac{4}{5}, 20$ f. $\frac{2}{6}, \frac{3}{9}, 24$
 g. $\frac{3}{4}, \frac{5}{8}, \frac{1}{16}, 16$ h. $\frac{2}{3}, \frac{1}{4}, \frac{15}{12}, 12$
 i. $\frac{1}{3}, \frac{5}{6}, \frac{1}{2}, 24$ j. $\frac{2}{10}, \frac{3}{4}, \frac{1}{2}, 20$

14-2. a. $\frac{3}{8} \times \frac{4}{2} = \frac{3}{2}$ b. $\frac{1}{2} \times \frac{8}{4} = 1$ c. $\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$
 d. $\frac{3}{4} \times \frac{4}{3} = 1$ e. $\frac{15}{12} \times \frac{1}{5} = \frac{1}{4}$ f. $\frac{3}{4} = \frac{9}{12}$ g. $\frac{9}{12} + \frac{5}{12} = \frac{14}{12} = 1\frac{1}{6}$
 h. $\frac{2}{8} \times \frac{4}{2} = \frac{1}{2}$ i. $\frac{3}{8} \times \frac{8}{16} = \frac{3}{16}$ j. $\frac{7}{16} + \frac{9}{16} = \frac{16}{16} = 1$
 k. $\frac{2}{3} \times \frac{3}{2} = 1$ l. $\frac{12}{3} \times \frac{8}{8} = 16$ m. $\frac{15}{24} + \frac{16}{24} = \frac{31}{24} = 1\frac{7}{24}$
 n. $\frac{3}{4} \times \frac{4}{3} = 1$ o. $\frac{14}{5} \times \frac{4}{14} = \frac{4}{5}$ p. $\frac{4}{5} = \frac{16}{20}$ q. $\frac{16}{20} + \frac{15}{20} = \frac{31}{20} = 1\frac{11}{20}$

$$\begin{aligned}
 f. \quad \frac{5}{8} \times \frac{6}{8} &= \frac{20}{24}; \quad \frac{3}{8} \times \frac{5}{8} = \frac{3}{8} \cdot \frac{3}{8} = \frac{9}{24}; \quad \frac{20}{24} + \frac{9}{24} = \frac{29}{24} = 1\frac{5}{24} \\
 g. \quad \frac{3}{8} \times \frac{6}{8} &= \frac{6}{8}; \quad \frac{5}{8} \times \frac{10}{12} = \frac{5}{16}; \quad \frac{1}{4} \times \frac{1}{4} = \frac{1}{16}; \quad \frac{6}{8} = \frac{12}{16}; \quad \frac{12}{16} + \frac{5}{16} + \frac{1}{16} = \frac{23}{16} = 1\frac{7}{16} \\
 h. \quad \frac{1}{3} \times \frac{1}{4} &= \frac{1}{12}; \quad \frac{1}{4} \times \frac{12}{12} = \frac{3}{12}; \quad \frac{5}{12} \times \frac{2}{3} = \frac{5}{12}; \quad \frac{4}{6} = \frac{8}{12}; \quad \frac{8}{12} + \frac{3}{12} + \frac{5}{12} = \frac{16}{12} = 1\frac{1}{3} \\
 i. \quad \frac{1}{4} \times \frac{2}{8} &= \frac{2}{32}; \quad \frac{1}{8} \times \frac{6}{8} = \frac{3}{32}; \quad \frac{1}{4} \times \frac{4}{4} = \frac{1}{4}; \quad \frac{2}{8} = \frac{1}{4}; \quad \frac{3}{8} = \frac{3}{8}; \quad \frac{1}{12} = \frac{1}{12} \\
 j. \quad \frac{7}{10} \times \frac{1}{4} &= \frac{7}{40}; \quad \frac{3}{4} \times \frac{2}{2} = \frac{3}{2}; \quad \frac{1}{2} \times \frac{10}{10} = \frac{5}{10}; \quad \frac{3}{4} = \frac{15}{20}; \quad \frac{5}{10} = \frac{10}{20} \\
 k. \quad \frac{15}{20} + \frac{10}{20} + \frac{10}{20} &= \frac{35}{20} = 1\frac{7}{4}
 \end{aligned}$$

$$\begin{aligned}
 4-3. \quad a. \quad \frac{1}{4} + \frac{1}{8} &= \frac{2}{8} + \frac{1}{8} = \frac{3}{8} & b. \quad \frac{1}{4} + \frac{3}{8} &= \frac{2}{8} + \frac{3}{8} = \frac{5}{8} \\
 c. \quad \frac{1}{3} + \frac{2}{9} &= \frac{3}{9} + \frac{2}{9} = \frac{5}{9} & d. \quad \frac{1}{8} + \frac{3}{16} &= \frac{2}{16} + \frac{3}{16} = \frac{5}{16} \\
 e. \quad \frac{1}{6} + \frac{5}{12} &= \frac{2}{12} + \frac{5}{12} = \frac{7}{12} & f. \quad \frac{3}{8} + \frac{1}{16} &= \frac{6}{16} + \frac{1}{16} = \frac{7}{16} \\
 g. \quad \frac{3}{4} + \frac{1}{16} &= \frac{12}{16} + \frac{1}{16} = \frac{13}{16} & h. \quad \frac{1}{2} + \frac{3}{4} &= \frac{2}{4} + \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4} \\
 i. \quad \frac{1}{4} + \frac{7}{8} &= \frac{2}{8} + \frac{7}{8} = \frac{9}{8} = 1\frac{1}{8} & j. \quad \frac{1}{3} + \frac{5}{6} &= \frac{2}{6} + \frac{5}{6} = \frac{7}{6} = 1\frac{1}{6} \\
 k. \quad \frac{1}{2} + \frac{7}{12} &= \frac{6}{12} + \frac{7}{12} = \frac{13}{12} = 1\frac{1}{12} & l. \quad \frac{1}{4} + \frac{15}{16} &= \frac{4}{16} + \frac{15}{16} = \frac{19}{16} = 1\frac{3}{16} \\
 m. \quad \frac{3}{4} + \frac{3}{8} &= \frac{6}{8} + \frac{3}{8} = \frac{9}{8} = 1\frac{1}{8} & n. \quad \frac{3}{4} + \frac{7}{8} &= \frac{6}{8} + \frac{7}{8} = \frac{13}{8} = 1\frac{5}{8} \\
 4-4. \quad o. \quad \frac{3}{4} + \frac{7}{16} &= \frac{12}{16} + \frac{7}{16} = \frac{19}{16} = 1\frac{3}{16} & p. \quad \frac{1}{3} + \frac{1}{6} &= \frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2} \\
 q. \quad \frac{1}{2} + \frac{1}{12} &= \frac{6}{12} + \frac{1}{12} = \frac{7}{12} & r. \quad \frac{1}{6} + \frac{1}{12} &= \frac{2}{12} + \frac{1}{12} = \frac{3}{12} = \frac{1}{4} \\
 s. \quad \frac{1}{4} + \frac{5}{12} &= \frac{3}{12} + \frac{5}{12} = \frac{8}{12} = \frac{2}{3} & t. \quad \frac{1}{3} + \frac{5}{12} &= \frac{4}{12} + \frac{5}{12} = \frac{9}{12} = \frac{3}{4}
 \end{aligned}$$

$$\begin{aligned}
 4-4. \quad a. \quad \frac{3}{4} - \frac{1}{8} &= \frac{6}{8} - \frac{1}{8} = \frac{5}{8} & b. \quad \frac{7}{8} - \frac{1}{16} &= \frac{14}{16} - \frac{1}{16} = \frac{13}{16} \\
 c. \quad \frac{5}{8} - \frac{1}{16} &= \frac{10}{16} - \frac{1}{16} = \frac{9}{16} & d. \quad \frac{3}{4} - \frac{1}{16} &= \frac{12}{16} - \frac{1}{16} = \frac{11}{16} \\
 e. \quad \frac{3}{4} - \frac{3}{16} &= \frac{12}{16} - \frac{3}{16} = \frac{9}{16} & f. \quad \frac{2}{3} - \frac{1}{12} &= \frac{8}{12} - \frac{1}{12} = \frac{7}{12} \\
 g. \quad \frac{11}{12} - \frac{1}{3} &= \frac{11}{12} - \frac{4}{12} = \frac{7}{12} & h. \quad \frac{15}{16} - \frac{1}{4} &= \frac{15}{16} - \frac{4}{16} = \frac{11}{16} \\
 i. \quad \frac{5}{6} - \frac{1}{2} &= \frac{5}{6} - \frac{3}{6} = \frac{2}{6} = \frac{1}{3} & j. \quad \frac{2}{3} - \frac{1}{6} &= \frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2} \\
 k. \quad \frac{2}{3} - \frac{5}{12} &= \frac{8}{12} - \frac{5}{12} = \frac{3}{12} = \frac{1}{4} & l. \quad \frac{3}{4} - \frac{7}{12} &= \frac{9}{12} - \frac{7}{12} = \frac{2}{12} = \frac{1}{6} \\
 m. \quad \frac{3}{4} - \frac{1}{2} &= \frac{3}{4} - \frac{2}{4} = \frac{1}{4} & n. \quad \frac{1}{2} - \frac{1}{4} &= \frac{2}{4} - \frac{1}{4} = \frac{1}{4} \\
 o. \quad \frac{1}{2} - \frac{1}{3} &= \frac{3}{6} - \frac{2}{6} = \frac{1}{6} & p. \quad \frac{2}{3} - \frac{1}{2} &= \frac{4}{6} - \frac{3}{6} = \frac{1}{6} \\
 q. \quad \frac{2}{3} - \frac{1}{4} &= \frac{8}{12} - \frac{3}{12} = \frac{5}{12} & r. \quad \frac{2}{3} - \frac{1}{3} &= \frac{1}{3} \\
 s. \quad \frac{11}{12} - \frac{1}{6} &= \frac{11}{12} - \frac{2}{12} = \frac{9}{12} = \frac{3}{4} & t. \quad \frac{5}{6} - \frac{1}{3} &= \frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}
 \end{aligned}$$

Unit 4

Section 13.

Review Assignment 13e,
Exercises 1-4.

88

Review Assignment 13e
Exercises 1-4Is this
place too
called
only?

1. common denominator: (a) Fractions having the same denominator.

least common denominator: (a) The smallest denominator shared by two or more fractions.

like fractions: (b) Any denominator shared by two or more fractions.

unlike fractions: (c) Fractions having different denominators.

$$2. a. 5,720 \text{ L. @ } \$12.40 \text{ T;}$$

$$5,720 \times \$12.40 = \$70,928.00;$$

$$\$70,928.00 \div 2,000 = \$354.64.$$

$$b. \$.356 = \$.36$$

$$15 \overline{) \$5.350}$$

$$\underline{45}$$

$$85$$

$$c. 37 \times \frac{3}{8} = \frac{37}{1} \times \frac{3}{8} = \frac{111}{8} = 13 \frac{7}{8}$$

$$d. \begin{array}{r} 37.3 \\ 1.9 \overline{) 70.87} \\ \underline{57} \\ 138 \\ \underline{133} \\ 57 \\ \underline{57} \end{array}$$

$$e. 2,800 \text{ L. @ } 37 \frac{1}{2} \phi$$

$$2,800 \text{ L. } \times \$.375 = \$1,050.00$$

$$\begin{array}{r} 1 \\ 25 \text{ L} \\ 125 \text{ L} \\ 0.5 \text{ L} \\ + 1,204 \text{ L} \\ \hline 1,354.5 \text{ L} \end{array}$$

$$4. \begin{array}{r} \$10.95 \\ \times .90 \\ \hline \$985.50 \end{array}$$

$$\begin{array}{r} \$985.50 \\ + 347.50 \\ \hline \$1,333.00 \end{array}$$

$$3. \begin{array}{r} 200 \quad 150 \quad \$130.00 \\ \times \$.65 \quad \times \$.95 \quad 142.50 \\ \hline \$130.00 \quad \$142.50 \quad + 15.00 \\ \hline \$287.50 \end{array}$$

$$\begin{array}{r} \$8.95 \\ \times 60 \\ \hline \$537.00 \end{array}$$

$$\begin{array}{r} \$1,870.00 \\ - 1,200.00 \\ \hline \$670.00 \end{array}$$

$$\begin{array}{r} \$.65 \quad \$.95 \quad \$20.15 \\ \times 31 \quad \times 43 \quad 40.85 \\ \hline \$20.15 \quad \$40.85 \quad + 226.85 \\ \hline \$287.85 \end{array}$$

$$\begin{array}{r} \$6.95 \\ \times 50 \\ \hline \$347.50 \end{array}$$

$$200 \overline{) \$670.00}$$

Over; by \$1.35

Sections 13-14.

Review Assignment 13e - Part 14a.
 Exercise 5 (for Review Assignment 13e),
 Exercise 1 (for Part 14a).

5. Checkbook balance:	\$490.31
Less:	
Service charge	<u>1.55</u>
Sub-total:	488.76
Add: Amount on check (Exp) \$10.00	
Deposit not recorded	<u>32.40</u>
Correct checkbook balance:	\$446.36

Section 14.

1. $2\frac{2}{3}$ yd. flannel @ \$3.99 = \$10.64	12 1	1-2. $4\frac{1}{2}$ oz. sun tan oil @ \$2.50 = \$11.25
$3\frac{1}{4}$ yd. wool @ 4.99 = 16.22		$3\frac{1}{2}$ oz. lotion @ 1.99 = 6.97
$3\frac{1}{2}$ yd. corduroy @ 1.88 = 6.58		$9\frac{3}{4}$ oz. tonic @ 2.22 = 21.65
$4\frac{5}{8}$ yd. lace @ .15 = .72		3 boxes cold capsules
\$34.16		@ 2 for 1.69 = 2.54
		\$42.41

3. 32 feet of wall studs @ \$.11 $\frac{3}{4}$ ft. = \$ 3.76	1 2 1
46 feet of pine shelving @ .56 $\frac{1}{3}$ ft. = 25.91	
65 floor tiles @ .16 $\frac{1}{2}$ ft. = 10.72 $\frac{4}{8}$	
75 feet of molding @ .12 $\frac{3}{8}$ ft. = 9.28 $\frac{1}{8}$	
\$49.67 $\frac{5}{8}$	

4. 150 feet @ 7 $\frac{3}{8}$ ¢ = \$ 11.06 $\frac{1}{4}$	2 3 2
50 feet @ 7 $\frac{3}{4}$ ¢ = 3.87 $\frac{2}{4}$	
35 feet @ 8 $\frac{1}{2}$ ¢ = 2.97 $\frac{2}{4}$	
15 feet @ 9 $\frac{1}{4}$ ¢ = 1.38 $\frac{3}{4}$	
\$19.30	

Unit 4.

Section 14.

Part 14b - Review Assignment 14b.

Exercises 2-3 (for Part 14b).

and Exercise 1 (for Review Assignment 14b).

90

$$\begin{array}{ll}
 2-1. \text{ a. } 33 \times 7\frac{1}{3} = \frac{33}{1} \times \frac{22}{3} = 242 & 2-2. \text{ a. } 72 \times 4\frac{5}{12} = \frac{72}{1} \times \frac{53}{12} = 318 \\
 \text{ b. } 45 \times 8\frac{2}{3} = \frac{45}{1} \times \frac{14}{3} = 387 & \text{ b. } 40 \times 5\frac{3}{8} = \frac{40}{1} \times \frac{43}{8} = 215 \\
 \text{ c. } 36 \times 3\frac{5}{6} = \frac{36}{1} \times \frac{23}{6} = 138 & \text{ c. } 54 \times 15\frac{1}{3} = \frac{54}{1} \times \frac{46}{3} = 816 \\
 2-3. \text{ a. } 25\frac{3}{8} \times 24 = \frac{203}{8} \times \frac{24}{1} = 609 & 2-4. \text{ a. } 17 \times 4\frac{3}{4} = \frac{17}{1} \times \frac{19}{4} = 80\frac{1}{4} \\
 \text{ b. } 14\frac{2}{3} \times 60 = \frac{122}{3} \times \frac{60}{1} = 864 & \text{ b. } 23 \times 3\frac{2}{3} = \frac{23}{1} \times \frac{11}{3} = 84\frac{1}{3} \\
 \text{ c. } 16\frac{5}{8} \times 72 = \frac{128}{8} \times \frac{72}{1} = 1152 & \text{ c. } 55 \times 7\frac{5}{8} = \frac{55}{1} \times \frac{57}{8} = 430\frac{5}{8} \\
 2-5. \text{ a. } 60 \times 5\frac{3}{8} = \frac{480}{1} \times \frac{43}{8} = 322\frac{1}{2} & \text{ b. } 29\frac{3}{4} \times 15 = \frac{119}{4} \times \frac{15}{1} = 426\frac{3}{4} \\
 \text{ c. } 19\frac{5}{8} \times 12 = \frac{157}{8} \times \frac{12}{1} = 235\frac{1}{2}
 \end{array}$$

$$\begin{array}{lll}
 3-1. \quad 4\frac{1}{8} = 4\frac{2}{16} & 3-2. \quad 6\frac{2}{3} = 6\frac{4}{6} & 3-3. \quad 9\frac{3}{4} = 9\frac{9}{12} \\
 \quad 5\frac{1}{16} = 5\frac{1}{16} & \quad 4\frac{1}{2} = 4\frac{2}{4} & \quad 4\frac{2}{3} = 4\frac{8}{12} \\
 \quad + 2\frac{3}{4} = + 2\frac{12}{16} & \quad + 7\frac{1}{6} = + 7\frac{1}{6} & \quad + 5\frac{5}{12} = + 5\frac{5}{12} \\
 \hline
 \quad \quad 9\frac{15}{16} & \quad \quad 17\frac{5}{6} = 18\frac{1}{6} & \quad \quad 18\frac{4}{12} = 19\frac{1}{3}
 \end{array}$$

$$\begin{array}{lll}
 3-4. \quad 3\frac{3}{4} = 3\frac{9}{12} & 3-5. \quad 8\frac{3}{4} = 8\frac{9}{12} & 3-6. \quad 7\frac{5}{8} = 7\frac{15}{24} \\
 \quad 8\frac{2}{3} = 8\frac{8}{12} & \quad 6\frac{1}{4} = 6\frac{3}{12} & \quad 9\frac{1}{8} = 9\frac{3}{24} \\
 \quad + 6\frac{1}{2} = + 6\frac{6}{12} & \quad + 3\frac{2}{3} = + 3\frac{4}{6} & \quad + 3\frac{1}{2} = + 3\frac{12}{24} \\
 \hline
 \quad \quad 17\frac{23}{12} = 18\frac{11}{12} & \quad \quad 17\frac{20}{12} = 18\frac{5}{6} & \quad \quad 19\frac{35}{24} = 20\frac{11}{24}
 \end{array}$$

$$\begin{array}{lll}
 3-8. \quad \frac{1}{3} = \frac{4}{12} & 3-9. \quad 8\frac{1}{2} = 8\frac{10}{20} & 3-10. \quad \frac{2}{3} = \frac{8}{12} \\
 \quad 2\frac{1}{4} = 2\frac{3}{12} & \quad \frac{3}{4} = \frac{15}{20} & \quad \frac{3}{4} = \frac{9}{12} \\
 \quad + 4\frac{5}{6} = + 4\frac{10}{12} & \quad + \frac{2}{5} = + \frac{8}{20} & \quad + \frac{5}{6} = + \frac{10}{12} \\
 \hline
 \quad \quad 6\frac{17}{12} = 6\frac{5}{6} & \quad \quad 8\frac{33}{20} = 8\frac{13}{20} & \quad \quad 9\frac{27}{12} = 10\frac{3}{4}
 \end{array}$$

Review Assignment 14b.

$$\begin{array}{l}
 1. \text{ a. } 1,500 \text{ copies @ } \$3.50 \text{ per C;} \\
 \quad 1,500 \times \$3.50 = \$5,250; \\
 \quad \$5,250 \div 100 = \$52.50
 \end{array}$$

$$b. 32 \times 875 = 28$$

$$c. 29 \times \frac{5}{8} = \frac{29}{1} \times \frac{5}{8} = \frac{145}{8} = 18\frac{1}{8}$$

$$\begin{array}{r}
 d. \quad 10,200 \\
 \times 1750 \\
 \hline
 51000 \\
 71400 \\
 10200 \\
 \hline
 17,850,000
 \end{array}$$

Section 14.

Unit 4.

Preview Assignment 14.b.

Exercises 1-6.

91

e. $\frac{1.194}{36} = 1.19$ f. $\frac{2.5L}{-450mL} = \frac{2.5L}{-45L}$

70

36

340

324

160

144

16

2. $\frac{\$.027}{18} = \$.43$

$\$.027$

$\$.027$

$\times 16$

$\$.382$

$\$.024$

$\frac{\$.024}{20} = \$.45$

$\$.024$

$\times 20$

$\$.50$

One cent (\$.01) is charged less for the lower priced mix.

3. $\$7.00$

$\$11.95$

4. $\$4.9$

$\$.19\frac{1}{2}$

$\times 15$

$15) \$179.25$

$\times 6$

$12) \$2.34$

$\$105.00$

15

$\$2.94$

12

$+ 4.25$

29

$\$2.94$

114

$\$109.25$

15

$\$2.94$

108

142

-2.34

6

135

$\$.60$

$\$.05$

75

$12) \$1.60$

75

5. $\frac{83}{85}$

6. $\$9.65$ 24 240

$\times 4 \times 5$

$\times 10$

$\times 10$

-30

332

425

$\$96.50$

240

210

425

$+ 40.00$

$\$136.50$

$\$.65$

-332

$210) \$136.50$

93

Brenda must get a score of 93 to average 85.

Unit 4

Section 14.

Review Assignment 14b - Part 14c.

Exercises 7-8 (for Review Assignment 14b),
and Exercise 4 (for Part 14c).

92

Review Assignment 14b (continued)

$$\begin{array}{r}
 7. \quad 90 \text{ cm} \quad 15 \text{ cm} \quad 42 \\
 \times 105 \text{ cm} \quad \times 15 \text{ cm} \quad 225 \overline{) 9450} \\
 \hline
 450 \quad 225 \text{ cm} \quad 900 \\
 \underline{900} \quad \quad \quad 450 \\
 9450 \text{ cm} \quad \quad \quad 450
 \end{array}$$

$$\begin{array}{r}
 8. \quad \$2.95 \quad \$9.70 \quad \$2.95 \\
 \times 6 \quad \times 12.5 \quad \times 75 \\
 \hline
 \$17.70 \quad \$121.25 \quad \$221.25 \\
 - 9.70 \quad \quad \quad \\
 \hline
 \$8.00
 \end{array}$$

The shop must sell 150 pairs in order to make the gross profit of \$100.00.

$$\begin{array}{r}
 \text{Part 14c.} \quad 4-1. \quad 7\frac{3}{8} = 7\frac{9}{24} \\
 - 3\frac{2}{4} = -3\frac{12}{24} \\
 \hline
 3\frac{5}{8}
 \end{array}$$

$$\begin{array}{r}
 4-2. \quad 9\frac{3}{12} = 9\frac{8}{16} \\
 - 3\frac{5}{8} = -3\frac{10}{16} \\
 \hline
 5\frac{7}{16}
 \end{array}$$

$$\begin{array}{r}
 4-3. \quad 18\frac{2}{3} = 18\frac{8}{12} \\
 - 5\frac{3}{4} = -5\frac{9}{12} \\
 \hline
 12\frac{11}{12}
 \end{array}$$

$$\begin{array}{r}
 4-4. \quad 16\frac{3}{4} = 16\frac{9}{12} \\
 - 8\frac{5}{6} = -8\frac{10}{12} \\
 \hline
 7\frac{11}{12}
 \end{array}$$

$$\begin{array}{r}
 4-5. \quad 13\frac{5}{8} = 13\frac{15}{16} \\
 - 7\frac{13}{16} = -7\frac{13}{16} \\
 \hline
 5\frac{13}{16}
 \end{array}$$

$$\begin{array}{r}
 4-6. \quad 8\frac{1}{8} = 8\frac{2}{12} \\
 - 3\frac{1}{4} = -3\frac{3}{12} \\
 \hline
 4\frac{11}{12}
 \end{array}$$

$$\begin{array}{r}
 4-7. \quad 7\frac{1}{6} = 7\frac{4}{12} \\
 - 3\frac{2}{3} = -3\frac{8}{12} \\
 \hline
 3\frac{3}{6} = 3\frac{1}{2}
 \end{array}$$

$$\begin{array}{r}
 4-8. \quad 18\frac{1}{4} = 18\frac{2}{8} \\
 - 6\frac{3}{8} = -6\frac{3}{8} \\
 \hline
 11\frac{7}{8}
 \end{array}$$

$$\begin{array}{r}
 4-9. \quad 43\frac{1}{3} = 43\frac{8}{24} \\
 - 8\frac{7}{8} = -8\frac{21}{24} \\
 \hline
 34\frac{11}{24}
 \end{array}$$

$$\begin{array}{r}
 4-10. \quad 25\frac{1}{4} = 25\frac{3}{12} \\
 - 7\frac{1}{3} = -7\frac{4}{12} \\
 \hline
 17\frac{11}{12}
 \end{array}$$

$$\begin{array}{r}
 4-11. \quad 18\frac{3}{4} = 18\frac{9}{12} \\
 - 10\frac{7}{8} = -10\frac{10.5}{12} \\
 \hline
 7\frac{7}{8}
 \end{array}$$

$$\begin{array}{r}
 4-12. \quad 8\frac{5}{12} = 8\frac{17}{12} \\
 - 3\frac{2}{3} = -3\frac{8}{12} \\
 \hline
 4\frac{9}{12} = 4\frac{3}{4}
 \end{array}$$

$$\begin{array}{r}
 4-13. \quad 10\frac{2}{5} = 10\frac{8}{25} \\
 - 4\frac{2}{3} = -4\frac{10}{15} \\
 \hline
 5\frac{14}{15}
 \end{array}$$

$$\begin{array}{r}
 4-14. \quad 9\frac{2}{5} = 9\frac{8}{25} \\
 - 4\frac{3}{4} = -4\frac{15}{20} \\
 \hline
 4\frac{13}{20}
 \end{array}$$

Section 14.

Unit 4.

Part 14c.

Exercises 5-6.

93

5-1. a. $1\frac{3}{4} = \frac{7}{4}$ b. $2\frac{3}{8} = \frac{19}{8}$

5-2. a. $4\frac{2}{3} = \frac{14}{3}$ b. $3\frac{5}{6} = \frac{23}{6}$

5-3. a. $12\frac{1}{2} = \frac{25}{2}$ b. $5\frac{7}{8} = \frac{47}{8}$

5-4. a. $6\frac{7}{12} = \frac{79}{12}$ b. $3\frac{9}{16} = \frac{57}{16}$

5-5. a. $4\frac{1}{15} = \frac{61}{15}$ b. $2\frac{11}{12} = \frac{35}{12}$

5-6. a. $2\frac{15}{16} = \frac{47}{16}$ b. $10\frac{5}{8} = \frac{85}{8}$

5-7. a. $3\frac{1}{4} \times 2\frac{1}{2} = \frac{13}{4} \times \frac{5}{2} = \frac{65}{8} = 8\frac{1}{8}$ b. $2\frac{1}{4} \times 4\frac{1}{5} = \frac{9}{4} \times \frac{21}{5} = \frac{189}{20} = 9\frac{9}{20}$
 c. $4\frac{1}{2} \times 2\frac{1}{4} = \frac{9}{2} \times \frac{9}{4} = \frac{81}{8} = 10\frac{1}{8}$ d. $3\frac{1}{5} \times 2\frac{1}{8} = \frac{16}{5} \times \frac{17}{8} = \frac{34}{5} = 6\frac{4}{5}$
 e. $4\frac{1}{8} \times 3\frac{1}{2} = \frac{33}{8} \times \frac{7}{2} = \frac{231}{16} = 14\frac{7}{16}$ f. $6\frac{1}{3} \times 4\frac{1}{4} = \frac{19}{3} \times \frac{17}{4} = \frac{323}{12} = 26\frac{11}{12}$
 g. $1\frac{1}{5} \times 2\frac{5}{8} = \frac{6}{5} \times \frac{21}{8} = \frac{63}{20} = 3\frac{3}{20}$ h. $3\frac{1}{5} \times 2\frac{1}{4} = \frac{16}{5} \times \frac{9}{4} = \frac{36}{5} = 7\frac{1}{5}$
 i. $5\frac{1}{4} \times 2\frac{1}{3} = \frac{21}{4} \times \frac{7}{3} = \frac{49}{2} = 24\frac{1}{2}$ j. $2\frac{3}{4} \times 1\frac{2}{3} = \frac{11}{4} \times \frac{5}{3} = \frac{55}{12} = 4\frac{7}{12}$

5-8. a. $28\frac{1}{5}$ b. $39\frac{1}{4}$ c. $24\frac{1}{3}$ d. $32\frac{1}{3}$
 $\times 5\frac{1}{4}$ $\times 8\frac{1}{3}$ $\times 6\frac{1}{2}$ $\times 9\frac{1}{2}$
 $\frac{1}{20}$ $\frac{1}{12}$ $\frac{1}{6}$ $\frac{1}{6}$
 7 13 12 16
 1 2 2 3
 140 312 144 288
 148 $\frac{1}{20}$ 327 $\frac{1}{12}$ 158 $\frac{1}{6}$ 307 $\frac{1}{6}$

e. $28\frac{1}{3}$ f. $56\frac{1}{8}$ g. $32\frac{1}{2}$ h. $24\frac{2}{3}$
 $\times 9\frac{1}{4}$ $\times 12\frac{1}{4}$ $\times 14\frac{1}{4}$ $\times 6\frac{1}{2}$
 $\frac{1}{12}$ $\frac{1}{24}$ $\frac{1}{8}$ $\frac{1}{3}$
 7 14 8 12
 3 2 7 2
 252 672 448 144
 262 $\frac{1}{12}$ 688 $\frac{1}{24}$ 463 $\frac{1}{8}$ 158 $\frac{1}{3}$

Unit 4.

Section 14

Review Assignment 14c.

Exercises 1-4.

94

Review Assignment 14c.

1. a. $\$3,108 = \3.11

$$\begin{array}{r} 23 \overline{) 71.500} \\ 69 \\ \hline 25 \\ 23 \\ \hline 200 \\ 184 \\ \hline 16 \end{array}$$

b. $28 \times \frac{5}{8} = \frac{28}{1} \times \frac{5}{8} = \frac{35}{2} = 17\frac{1}{2}$

c. $52 \times 3\frac{5}{8} = \frac{52}{1} \times \frac{29}{8} = \frac{577}{2} = 188\frac{1}{2}$

25.

23

200

184

16

d. $12\frac{3}{4} = 12\frac{9}{12}$

$8\frac{1}{4} = 8\frac{3}{12}$

$+ 11\frac{5}{6} = + 11\frac{10}{12}$

$31\frac{29}{12} = 32\frac{5}{3}$

e. $42 \overline{) 1.86}$

78.12

42

361

336

252

252

f. 125.0 ha

$- 78.7 \text{ ha}$

46.3 ha

2. $\$37,988$

$- 34,035$

$\$3,955$

$+ 13,155$

$\$17,110$

3. $135 \times \$13.00$

$\times 10$

$1,350$

$\times 10$

$\$130.00$

$4 \times$

270

$\times \$.69$

2430

1620

$\$186.30$

$\$186.30$

$- 130.00$

$\$56.30$

5) 270

$1,350$

4. $\$2,130$

$\times 4$

$\$8,520$

$2 \times$

$\$2,150$

$\times 5$

$\$10,750$

$- 8,520$

$\$2,230$

The salesperson needs
 $\$2,230$ in order to make
 a weekly average of $\$2,150$.

Section 15.
Part 15a.
Exercises 1-2.

Unit 4.

95

Section 15.

-1.	Amount	Container	Description	Quoted Price	Price per Gallon
a.	1 qt. = $\frac{1}{4}$ gal.	can	Shellac	\$ 2.09	\$ 8.36
b.	$\frac{1}{4}$ qt. = $\frac{1}{16}$ gal.	can	Varnish	.80	12.80
c.	$\frac{1}{2}$ gal.	can	Charcoal lighter	1.49	2.98
d.	$\frac{1}{8}$ gal.	can	Stain	2.89	23.12
e.	3 qt. = $\frac{3}{4}$ gal.	bottle	Fabric softener	2.99	3.99

-2.	Quantity	Description	Quoted Price	Price per Dozen
a.	2	Apples	21¢	\$1.26
b.	3	Onions	33¢	1.32
c.	9	Rolls	\$1.69	2.28
d.	8 ears	Corn	\$1.19	1.80
e.	7	Grapefruit	\$1.25	2.14
f.	6	Oranges	99¢	1.98

-3. 6 oz. jar of coffee @ \$5.49
1 lb. jar of coffee @ \$13.50

a. \$.91 = \$.92 $\frac{3}{4}$ \$.92 b. \$14.72
6) \$5.49 $\times 16$ = 13.50
 \$14.72 \$ 1.22

-1.	Weight	Container	Contents	Price	Price per lb.
a.	$\frac{1}{4}$ lb.	bottle	Ketchup	\$.65	\$.52
b.	$\frac{1}{8}$ lb.	box	Salt	.39	.24
c.	$3\frac{3}{4}$ lb.	can	Boiled ham	8.99	2.40
d.	$1\frac{3}{8}$ lb.	box	Shrimp	9.90	7.20
e.	$1\frac{5}{8}$ lb.	can	Tomatoes	.89	.56
f.	$2\frac{1}{2}$ lb.	box	Pancake mix	.98	.40

Unit 4.

Section 15.

Part 15a - Review Assignment 15a.

Exercise 2 (for Part 15a),

and Exercises 1-4 (for Review Assignment 15a).

96

Exercise 2
(continued).

- 2-2. 40 oz. box of laundry powder @ \$.99
3 lb. 2 oz. (50 oz.) of laundry powder @ \$1.19

$$\begin{array}{r} \$.02\frac{19}{40} = \$.03 \\ 40 \overline{) \$.99} \\ \underline{a. \$.03} \\ \times 16 \\ \hline \$.48 \end{array} \quad \begin{array}{r} \$.02\frac{19}{50} = \$.03 \\ 50 \overline{) \$ 1.19} \\ \underline{b. \$.03} \\ \times 16 \\ \hline \$.48 \end{array}$$

b. Both brands are approximately the same.

Review
Assignment 15a.

1. a. $18\frac{2}{3} = 18\frac{8}{12}$
 $9\frac{3}{4} = 9\frac{9}{12}$
 $+ 8\frac{5}{6} = + 8\frac{10}{12}$
 $35\frac{27}{12} = 37\frac{1}{4}$

b. $16\frac{1}{3} = 16\frac{8}{24}$
 $- 9\frac{5}{3} = - 9\frac{15}{24}$
 $6\frac{17}{24}$

c. $12\frac{1}{4} \times 8\frac{1}{3}$
 $= \frac{49}{4} \times \frac{25}{3} = \frac{1205}{12} = 100\frac{5}{12}$

d. $34,000 \overline{) 2,890,000}$
 $270,000$
 $170,000$
 $170,000$

e. 6,340 lb. @ \$25.60 T;
 $6,340 \text{ lb} \times \$25.60 = \$162,304.00$
 $\$162,304.00 : 2,000 = \81.15

2. a. $6,800 \times 270 = 1,836,000$
b. $54 \times \frac{5}{6} = 45$
c. $\frac{3}{4} \times 35 = 26\frac{1}{4}$

3. 25 lb. need @ \$1.05 = \$26.25
15 lb. need @ 1.55 = 23.25
10 lb. need @ 2.15 = 21.50
50 lb. \$71.00

$\$ 1.42$
 $50 \overline{) \$ 71.00}$
 50
 210
 200
 100
 100

4. 1 lb. 6 oz. can (22 oz.) peas @ 37¢
40 oz. can peas @ 65¢

1.76
 $\times 16$
 26.24
 1.6
 $\times 16$
 25.64

The brand, Red Star, costs .6¢ less per pound.

Section 15.

Unit 4.

Review Assignment 15a - Part 15b.

Exercises 5-9 (for Review Assignment 15a),
and Exercise 3 (for Part 15b).

97

$$5. \begin{array}{r} \$100.00 \\ + 787.16 \\ \hline \end{array}$$

$$\begin{array}{r} \$887.16 \\ - 39.48 \\ \hline \end{array}$$

$$\begin{array}{r} \$847.68 \\ - 847.09 \\ \hline \end{array}$$

$$\begin{array}{r} \$.59 \end{array}$$

$$\text{Short; by } 59¢.$$

$$3.2 \times 6 = 19.2$$

$$\begin{array}{r} 19.2 \\ \times 120 \\ \hline \end{array}$$

$$\begin{array}{r} 1990 \\ 995 \\ \hline \end{array}$$

$$\begin{array}{r} \$1,194.00 \\ + 318.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$1,631.00 \\ - 1,085.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$546.00 \\ + 119.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$1,631.00 \end{array}$$

$$\begin{array}{r} 180 \overline{) \$546.00} \\ \underline{540} \\ 600 \\ \underline{540} \\ 60 \end{array}$$

$$\begin{array}{r} 16.320 \end{array}$$

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$$6. \$.70 \times 4 = \$2.80$$

$$\begin{array}{r} -2.20 \\ \hline \end{array}$$

$$\begin{array}{r} \$.60 \end{array}$$

$$\$.60 \div 12 = \$.05$$

$$7. \begin{array}{r} \$9.95 \\ \times 120 \\ \hline \end{array}$$

$$\begin{array}{r} 1990 \\ 995 \\ \hline \end{array}$$

$$\begin{array}{r} \$1,194.00 \\ + 318.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$1,631.00 \end{array}$$

$$\begin{array}{r} 180 \overline{) \$546.00} \\ \underline{540} \\ 600 \\ \underline{540} \\ 60 \end{array}$$

$$\begin{array}{r} 16.320 \end{array}$$

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$$\begin{array}{r} 16.320 \end{array}$$

$$8. \begin{array}{r} \$7.95 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} 318.00 \\ 318.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$318.00 \end{array}$$

$$\begin{array}{r} 180 \overline{) \$546.00} \\ \underline{540} \\ 600 \\ \underline{540} \\ 60 \end{array}$$

$$\begin{array}{r} 16.320 \end{array}$$

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$$\begin{array}{r} 16.320 \end{array}$$

$$9. \begin{array}{r} \$5.95 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 119.00 \\ 119.00 \\ \hline \end{array}$$

$$\begin{array}{r} \$119.00 \end{array}$$

$$\begin{array}{r} 180 \overline{) \$546.00} \\ \underline{540} \\ 600 \\ \underline{540} \\ 60 \end{array}$$

$$\begin{array}{r} 16.320 \end{array}$$

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$$\begin{array}{r} 16.320 \end{array}$$

Checkbook balance:	\$ 742.16
Less:	
Service charge \$ 1.45	
Check not recorded 9.15	10.60
Sub-total:	731.56
Add: Deposit not recorded	37.50
Correct checkbook balance:	\$ 769.06

$$1. a. 1 \div \frac{1}{2} = 1 \times 2 = 2$$

$$c. 2 \div \frac{1}{4} = 2 \times 4 = 8$$

$$e. 2 \div \frac{3}{5} = 2 \times 1\frac{1}{2} = 3$$

$$g. \frac{1}{3} \div \frac{1}{2} = \frac{1}{3} \times 2 = \frac{2}{3}$$

$$i. \frac{1}{5} \div \frac{1}{4} = \frac{1}{5} \times 4 = \frac{4}{5}$$

$$b. \frac{1}{4} \div \frac{1}{4} = \frac{1}{4} \times 4 = 1$$

$$d. \frac{1}{2} \div \frac{1}{4} = \frac{1}{2} \times 4 = 2$$

$$b. 1 \div \frac{1}{3} = 1 \times 3 = 3$$

$$d. 4 \div \frac{1}{3} = 4 \times 3 = 12$$

$$f. 5 \div \frac{5}{8} = 5 \times 1\frac{2}{5} = 8$$

$$h. \frac{1}{4} \div \frac{1}{3} = \frac{1}{4} \times 3 = \frac{3}{4}$$

$$3-2. a. \frac{1}{3} \div \frac{1}{3} = \frac{1}{3} \times 3 = 1$$

$$c. \frac{2}{3} \div \frac{2}{3} = \frac{2}{3} \times 1\frac{1}{2} = 1$$

$$e. \frac{5}{8} \div \frac{5}{16} = \frac{5}{8} \times 3\frac{1}{2} = 2$$

Unit 4.

Section 15.

Part 15b.

Exercises 3-4.

98.

Exercise 13
(continued).

f. $\frac{1}{3} \div \frac{1}{12} = \frac{1}{3} \times 12 = 4$

h. $\frac{3}{8} \div \frac{5}{8} = \frac{3}{8} \times \frac{8}{5} = \frac{3}{5}$

3-3. a. $\frac{2}{3} \div \frac{2}{3} = \frac{2}{3} \times \frac{3}{2} = 1$

c. $\frac{3}{5} \div \frac{3}{4} = \frac{3}{5} \times \frac{4}{3} = \frac{4}{5}$

e. $\frac{5}{8} \div \frac{5}{16} = \frac{5}{8} \times \frac{16}{5} = 2$

g. $\frac{8}{9} \div \frac{2}{9} = \frac{8}{9} \times \frac{9}{2} = 4$

i. $\frac{2}{5} \div \frac{1}{2} = \frac{2}{5} \times 2 = \frac{4}{5}$

b. $\frac{2}{9} \div \frac{1}{4} = \frac{2}{9} \times 4 = \frac{8}{9}$

d. $\frac{1}{3} \div \frac{3}{4} = \frac{1}{3} \times \frac{4}{3} = \frac{4}{9}$

f. $\frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3} = \frac{8}{9}$

h. $\frac{3}{4} \div \frac{2}{7} = \frac{3}{4} \times \frac{7}{2} = \frac{21}{8}$

3-5. a. $\frac{3}{3} \div 3 = \frac{3}{3} \times \frac{1}{3} = \frac{1}{3}$

c. $\frac{3}{4} \div 3 = \frac{3}{4} \times \frac{1}{3} = \frac{1}{4}$

e. $\frac{8}{11} \div 4 = \frac{8}{11} \times \frac{1}{4} = \frac{2}{11}$

g. $\frac{8}{12} \div 4 = \frac{8}{12} \times \frac{1}{4} = \frac{1}{6}$

i. $\frac{1}{4} \div 5 = \frac{1}{4} \times \frac{1}{5} = \frac{1}{20}$

b. $\frac{1}{6} \div 4 = \frac{1}{6} \times \frac{1}{4} = \frac{1}{24}$

d. $\frac{3}{4} \div 5 = \frac{3}{4} \times \frac{1}{5} = \frac{3}{20}$

f. $\frac{3}{8} \div 6 = \frac{3}{8} \times \frac{1}{6} = \frac{1}{8}$

h. $3 \div 18 = 3 \times \frac{1}{18} = \frac{1}{6}$

g. $\frac{2}{3} \div \frac{2}{3} = \frac{2}{3} \times \frac{3}{2} = 1$

i. $\frac{1}{4} \div \frac{1}{4} = \frac{1}{4} \times \frac{4}{1} = 1$

b. $\frac{3}{8} \div \frac{3}{5} = \frac{3}{8} \times \frac{5}{3} = \frac{5}{8}$

d. $\frac{2}{4} \div \frac{3}{8} = \frac{2}{4} \times \frac{8}{3} = 2$

f. $\frac{2}{3} \div \frac{2}{9} = \frac{2}{3} \times \frac{9}{2} = 3$

h. $\frac{2}{7} \div \frac{5}{7} = \frac{2}{7} \times \frac{7}{5} = \frac{2}{5}$

3-4. a. $\frac{3}{10} \div \frac{1}{3} = \frac{3}{10} \times 3 = \frac{9}{10}$

c. $\frac{1}{2} \div \frac{2}{3} = \frac{1}{2} \times \frac{3}{2} = \frac{3}{4}$

e. $\frac{1}{4} \div \frac{2}{5} = \frac{1}{4} \times \frac{5}{2} = \frac{5}{8}$

g. $\frac{3}{4} \div \frac{4}{5} = \frac{3}{4} \times \frac{5}{4} = \frac{15}{16}$

i. $\frac{5}{6} \div \frac{3}{4} = \frac{5}{6} \times \frac{4}{3} = \frac{10}{9}$

b. $\frac{4}{5} \div 4 = \frac{4}{5} \times \frac{1}{4} = \frac{1}{5}$

d. $\frac{5}{8} \div 5 = \frac{5}{8} \times \frac{1}{5} = \frac{1}{8}$

f. $\frac{12}{25} \div 3 = \frac{12}{25} \times \frac{1}{3} = \frac{4}{25}$

h. $\frac{12}{15} \div 3 = \frac{12}{15} \times \frac{1}{3} = \frac{4}{15}$

3-6. a. $\frac{1}{3} \div 4 = \frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$

c. $\frac{2}{5} \div 3 = \frac{2}{5} \times \frac{1}{3} = \frac{2}{15}$

e. $\frac{2}{3} \div 8 = \frac{2}{3} \times \frac{1}{8} = \frac{1}{12}$

g. $24 \div 8 = 24 \times \frac{1}{8} = 3$

i. $8 \div 28 = 8 \times \frac{1}{28} = \frac{2}{7}$

4-1. a. $5 \div \frac{2}{3} = 5 \times \frac{3}{2} = 7\frac{1}{2}$

b. $14 \div \frac{5}{8} = 14 \times \frac{8}{5} = 22\frac{2}{5}$

c. $27 \div \frac{2}{3} = 27 \times \frac{3}{2} = 40\frac{1}{2}$

d. $36 \div \frac{4}{5} = 36 \times \frac{5}{4} = 45$

e. $24 \div \frac{3}{5} = 24 \times \frac{5}{3} = 40$

f. $2 \div \frac{8}{9} = 2 \times \frac{9}{8} = 2\frac{1}{4}$

g. $8 \div \frac{5}{7} = 8 \times \frac{7}{5} = 11\frac{1}{5}$

h. $6 \div \frac{4}{5} = 6 \times \frac{5}{4} = 7\frac{1}{2}$

i. $\frac{2}{3} \div \frac{4}{5} = \frac{2}{3} \times \frac{5}{4} = \frac{5}{6}$

4-3. a. $3 \div \frac{9}{10} = 3 \times \frac{10}{9} = 3\frac{1}{3}$

b. $\frac{2}{3} \div \frac{4}{5} = \frac{2}{3} \times \frac{5}{4} = \frac{5}{6}$

c. $\frac{4}{5} \div \frac{5}{6} = \frac{4}{5} \times \frac{6}{5} = \frac{24}{25}$

d. $\frac{9}{10} \div 6 = \frac{9}{10} \times \frac{1}{6} = \frac{3}{20}$

e. $\frac{4}{5} \div 10 = \frac{4}{5} \times \frac{1}{10} = \frac{2}{25}$

f. $\frac{2}{3} \div 12 = \frac{2}{3} \times \frac{1}{12} = \frac{1}{18}$

g. $\frac{4}{5} \div 10 = \frac{4}{5} \times \frac{1}{10} = \frac{2}{25}$

Section 15.

Part 15b - Review Assignment 15b.

Exercise 5 (for Part 15b),

and Exercises 1-3 (for Review Assignment 15b).

1. a. $4\frac{3}{8} \div 5 = 4\frac{3}{8} \times \frac{1}{5} = \frac{7}{8}$

b. $5\frac{3}{5} \div 7 = 5\frac{3}{5} \times \frac{1}{7} = \frac{4}{5}$

c. $3\frac{3}{4} \div 4 = 3\frac{3}{4} \times \frac{1}{4} = \frac{15}{16}$

d. $6\frac{3}{4} \div 9 = 6\frac{3}{4} \times \frac{1}{9} = \frac{3}{4}$

2. a. $6\frac{2}{3} \div 8 = 6\frac{2}{3} \times \frac{1}{8} = \frac{5}{6}$

b. $8\frac{3}{4} \div 15 = 8\frac{3}{4} \times \frac{1}{15} = \frac{7}{12}$

c. $2 \div 3\frac{1}{2} = 2 \times \frac{2}{3\frac{1}{2}} = \frac{16}{25}$

d. $4 \div 6\frac{2}{5} = 4 \times \frac{5}{32} = \frac{5}{8}$

3. a. $5 \div 6\frac{2}{3} = 5 \times \frac{3}{20} = \frac{3}{4}$

b. $3 \div 4\frac{1}{2} = 3 \times \frac{2}{9} = \frac{2}{3}$

c. $2\frac{2}{5} \div 1\frac{1}{3} = 2\frac{2}{5} \times \frac{3}{4} = 1\frac{4}{5}$

d. $1\frac{1}{4} \div 1\frac{2}{3} = 1\frac{1}{4} \times \frac{3}{5} = \frac{3}{4}$

4. a. $8\frac{3}{4} \div \frac{5}{6} = 8\frac{3}{4} \times 1\frac{1}{5} = 10\frac{1}{2}$

b. $1\frac{1}{4} \div 8\frac{1}{2} = 1\frac{1}{4} \times \frac{2}{25} = \frac{3}{20}$

c. $5\frac{1}{8} \div 6\frac{5}{6} = 5\frac{1}{8} \times \frac{6}{41} = \frac{3}{4}$

d. $1\frac{2}{3} \div 1\frac{1}{9} = 1\frac{2}{3} \times \frac{9}{10} = 1\frac{1}{2}$

5. a. $11\frac{3}{4} \div 1\frac{1}{4} = 11\frac{3}{4} \times \frac{4}{5} = 9\frac{2}{5}$

b. $16\frac{1}{2} \div 3\frac{2}{3} = 16\frac{1}{2} \times \frac{3}{8} = 6\frac{3}{16}$

c. $6\frac{5}{6} \div 5\frac{1}{8} = 6\frac{5}{6} \times \frac{8}{41} = 1\frac{1}{3}$

d. $32\frac{1}{2} \div 6\frac{1}{2} = 32\frac{1}{2} \times \frac{2}{13} = 5$

1. a. $18\frac{2}{3} = 18\frac{8}{12}$

b. $12\frac{1}{4} = 12\frac{3}{12}$

c. $12\frac{1}{2} \times 8\frac{1}{4}$

$12\frac{1}{4} = 12\frac{3}{12}$

$- 7\frac{1}{3} = -7\frac{4}{12}$

$= \frac{25}{2} \times \frac{33}{4} = \frac{825}{8} = 103\frac{1}{8}$

$+ 13\frac{5}{6} = +13\frac{10}{12}$

$4\frac{11}{12}$

$43\frac{21}{12} = 44\frac{3}{4}$

e. $\frac{1}{5} \times 20 = 4$

d. 3.36

$28,000 \overline{) 94,080.00}$

84000

100800

84000

168000

168000

f. $12.5 \text{ m} = 12.50 \text{ m}$

$150 \text{ cm} = 1.150 \text{ m}$

$+ 250 \text{ mm} + .25 \text{ m}$

14.25 m

2. $\begin{array}{r} 12 \\ \$1,990 \end{array} \quad \begin{array}{r} \$2,100 \\ 2,180 \end{array}$

$\begin{array}{r} \times 5 \\ 2,030 \end{array}$

$\begin{array}{r} \$10,800 \\ + 2,140 \end{array}$

$\begin{array}{r} - 8,340 \\ \$8,340 \end{array}$

$\begin{array}{r} \$2,160 \end{array}$

The sales in the fifth week
must come out to \$2,160.

3. $\begin{array}{r} \$3,040 \\ \times 13 \\ \hline \end{array}$

$\begin{array}{r} \$39,520 \end{array}$

Unit 4.

Section 15.

Review Assignment 15b - Part 15c.

Exercises 4-6 (for Review Assignment 15b),
and Exercises 6-7 (for Part 15c).

100

Review Assignment 15b (continued)

$$\begin{array}{r}
 4. \quad \$2,365 \quad \$2,285 \quad \$2,374 \\
 \times \quad 9 \quad 1,873 \quad 12) \$28,488 \\
 \hline
 \$21,285 \quad 2,406 \quad 24 \\
 \quad \quad + 2,924 \quad 44 \\
 \quad \quad \hline
 \quad \quad \$28,488 \quad 36 \\
 \quad \quad \quad \quad 88
 \end{array}$$

$$\begin{array}{r}
 5. \quad 300 \quad \$29.95 \quad \$2,396.00 \quad 84 \\
 \times 12 \quad \times 80 \quad 2,495.00 \quad 48 \\
 \hline
 \$4,392.00 \quad \$2,396.00 \quad + 2,374.00 \quad 48 \\
 \hline
 \$24.75 \quad \$12.95 \quad \$7,285.00 \\
 \times 12 \quad \times 12 \quad - 4,800.00 \\
 \hline
 \$297.00 \quad 399.00 \quad \$2,485.00 \\
 \quad \quad 105.00 \quad \$2,374.00 \quad 300 \times 12 = 3,600
 \end{array}$$

$$\begin{array}{r}
 6. \quad \$2.00 \quad \$13.50 \quad \$13.50 \quad \$522.00 \quad \$7.50 \\
 \times 60 \quad \times 60 \quad \times 52 \quad + 250.00 \quad 8) \$60.00 \\
 \hline
 \$522.00 \quad \$810.00 \quad 2700 \quad \$772.00 \\
 \quad \quad - 702.00 \quad 6750 \quad - 702.00 \\
 \quad \quad \hline
 \quad \quad \$108.00 \quad \$702.00 \quad \$60.00
 \end{array}$$

Part 15c. 6-1. 14 girls, 10 boys: 6-2. 9 games won,
a. 10 to 14 : 14 to 10 4 games lost: $\frac{9}{4}$
c. $\frac{10}{14}$: $\frac{14}{10}$

6-3. 7 in. to 2 ft. (24 in.): $\frac{7}{24}$ 6-6. a. 17¢ to 39¢ = $\frac{17}{39}$
6-4. 9 oz. to 3 lb. (48 oz.): $\frac{9}{48}$ b. \$.27 to \$.43 = $\frac{27}{43}$
6-5. \$1 to \$120 = $\frac{1}{120}$

7-1. 24 to 28 = $\frac{6}{7}$ 7-2. 10 in. to 24 in. = $\frac{5}{12}$
7-3. 5 in. to 5 ft. (60 in.) = $\frac{1}{12}$ 7-4. 4 oz. to 1 lb. (16 oz.) = $\frac{1}{4}$
7-5. 1 hr. (60 min.) to 20 min. = $\frac{1}{3}$ 7-6. 2 lb. (32 oz.) to 6 oz. = $\frac{16}{3}$

Section 15.

Part 15c.

Exercises 7-9.

Unit 4.

101

7-7. 3 yd. (9 ft.) to 2 ft. = $\frac{9}{2}$ 7-8. 27 to 21 = $\frac{9}{7}$

7-9. 44 to 16 = $\frac{11}{4}$

8-1. 14 ($2 \times 7 = 14$, $3 \times 7 = 21$, $14 + 21 = 35$)

8-2. 50 ($5 \times 10 = 50$, $1 \times 10 = 10$, $50 + 10 = 60$)

8-3. 5 ($1 \times 5 = 5$, $3 \times 5 = 15$, $5 + 15 = 20$)

8-4. Ira's share: \$15 ($\$5 \times 3 = \15)

Tom's share: \$9 ($\$3 \times 3 = \9)

($\$15 + \$9 = \$24$)

8-5. Partner #1: \$2,000 ($\$1,000 \times 2 = \$2,000$)

Partner #2: \$5,000 ($\$1,000 \times 5 = \$5,000$)

($\$2,000 + \$5,000 = \$7,000$)

8-6. Sally's share: \$16,000 ($\$2,000 \times 8 = \$16,000$)

Pia's share: \$8,000 ($\$2,000 \times 4 = \$8,000$)

($\$16,000 + \$8,000 = \$24,000$)

8-7. Office time: 5 hours ($1 \times 5 = 5$)

Travel time: 35 hours ($7 \times 5 = 35$)

($5 + 35 = 40$)

9-1. $100 \div 40 = 2.5$

$2.5 \times 36 = 90$

90 lbs.

9-2. $200 \div 5 = 40$

$40 \times 8 = 320$

320 miles

9-3. $75 \div 5 = 15$

$180 \div 15 = 12$

12 gal.

9-4. $175 \div 5 = 35$

$245 \div 35 = 7$

7 hours

9-5. $\$14 \div 3\frac{1}{2} = \4

$\$4 \times 5 = \20

\$20

9-6. $\$176 \div 8 = \22

$\$22 \times 6 = \132

\$132

9-7. $\$250 \div \$20 = 12.5\%$

$\$350 \div 12.5\% = \28

\$28

9-8. $\$160 \div \$100 = 1.6\%$

$\$150 \div 1.6\% = \93.75

\$93.75

Unit 4.

Section 15.

Part 15c - Review Assignment 15c.

Exercise 9 (for Part 15c),
and Exercises 1-3 (for Review Assignment 15c).

102

Exercise 9
(continued)

$$\begin{aligned} 9-9. \quad \$7.50 \div 6 &= \$1.25 \\ \$1.25 \times 10 &= \$12.50 \\ \$12.50 \end{aligned}$$

$$\begin{aligned} 9-10. \quad \$12.00 \div 8 &= \$1.50 \\ \$60.00 \div \$1.50 &= 40 \\ 40 \text{ packages} \end{aligned}$$

Review Assignment 15c

1. cross product: (a) The result of multiplying a denominator by a numerator in a proportion.
inverting the fraction: (c) "Switching" a numerator and a denominator.
proportion: (a) Shows the equality of two ratios.
ratio: (a) A way of comparing two numbers.
reciprocal: (b) An inverted fraction.

$$\begin{aligned} 2. a. 1,280 \text{ articles} @ 95¢ \text{ per c}; & \quad b. \quad \$4,914 = \$4.91 \\ 1,280 \times \$95 &= \$1,216.00; & \quad 35 \overline{) \$172,000} \\ \$1,216.00 \div 100 &= \$12.16 \end{aligned}$$

$$\begin{aligned} c. \quad 12\frac{1}{4} &= 12\frac{3}{12} \\ - 5\frac{1}{2} &= -5\frac{6}{12} \end{aligned}$$

$$d. \quad 16\frac{2}{3} \times 9\frac{3}{4} = \frac{25}{3} \times \frac{39}{4} = \frac{325}{2} = 162\frac{1}{2}$$

$$e. \quad 1,200 \text{ items} @ 87\frac{1}{2}¢ = \$1,050.00$$

$$\begin{aligned} f. \quad & 3 \overset{1}{1}00 \text{ cm}^2 \\ & 5 \text{ } 000 \text{ cm}^2 \\ & 2 \text{ } 450 \text{ cm}^2 \\ & + 50 \text{ cm}^2 \\ & \hline & 10 \text{ } 600 \text{ cm}^2 = 106 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} 3. \quad a. \quad \frac{1}{4} \times 32 &= 8 \\ b. \quad 31 \times \frac{7}{8} &= 27\frac{1}{8} \\ c. \quad 17 \div \frac{3}{4} &= 17 \times \frac{4}{3} = 22\frac{2}{3} \end{aligned}$$

Section 15.
Review Assignment 15c.
Exercises 4-7.

Unit 4.

103

Clinton Brooks
Reconciliation Statement
June 1, 1981

June 1, 1981

Bank statement balance: \$779.58

Less outstanding checks:

#194 \$13.42

#195 46.50

#196 38.70

#197	41.00
------	-------

Available bank balance: \$639.96

Available bank balance: \$639.96

5. $\begin{array}{r} ^5 ^2 ^3 \\ \$3,936 \\ \times 6 \\ \hline \$23,616 \end{array}$

6. $\begin{array}{r} ^{12} ^{11} \\ \$23,616 \\ + 3,943 \\ \hline \$31,424 \end{array}$

7. $\begin{array}{r} \$3,928 \\ 8 \overline{) \$31,424} \\ \underline{24} \\ 74 \end{array}$

				12
5. 200	316	\$ 150.00		22
<u>x \$.75</u>	<u>x \$.50</u>	158.00		16
1000	\$ 158.00	+ 15.00		64
<u>1400</u>		<u>\$ 323.00</u>		<u>64</u>
\$ 150.00				

$$\begin{array}{r} 32 \\ \$75 \\ \times 67 \\ \hline 525 \\ 450 \\ \hline \$50.25 \end{array}$$

Short; by 50¢.

7. Sue's net income:
 $\$37,500 (\$7,500 \times 5 = \$37,500)$
 Olga's net income:
 $\$22,500 (\$7,500 \times 3 = \$22,500)$
 $(\$37,500 + \$22,500 = \$60,000)$

Unit 4.

Section 15.

Review Assignment 15c.

Exercises 8-10.

104

Review Assignment 15c (continued)

$$\begin{array}{r}
 8. \quad \$760.00 \\
 + 48.00 \\
 \hline
 \$808.00 \\
 - 50.70 \\
 \hline
 \$757.30 \\
 + 550.00 \\
 \hline
 \$1,307.30
 \end{array}$$

$$\begin{array}{r}
 \$5.066 = \$5.07 \\
 150 \overline{) \$760.000} \\
 \underline{750} \\
 1000 \\
 \underline{900} \\
 1000 \\
 \underline{900} \\
 100
 \end{array}$$

$$\begin{array}{r}
 \$9.337 \\
 140 \overline{) \$1,307.300} \\
 \underline{1260} \\
 473 \\
 \underline{420} \\
 530 \\
 \underline{420} \\
 1100 \\
 \underline{980} \\
 120
 \end{array}$$

\$9.34

$$\begin{array}{r}
 9. \quad \begin{array}{c} 3 \ 3 \ 3 \\ 2888 \text{ cm}^2 \end{array} \\
 \times \quad \begin{array}{c} 4 \end{array} \\
 \hline
 11552 \text{ cm}^2 = 115.52 \text{ m}^2
 \end{array}$$

$$\begin{array}{r}
 10. \quad \begin{array}{c} 5 \\ \$67.00 \end{array} \quad \begin{array}{c} 3 \\ \$115.00 \end{array} \quad \begin{array}{c} 14 \\ \$115.00 \end{array} \quad \begin{array}{c} 80 \\ \$6,900.00 \end{array} \\
 \times \quad 60 \quad \times \quad 60 \quad \times \quad 48 \quad - \quad 5,520.00 \\
 \hline
 \$4,140.00 \quad \$6,900.00 \quad 92000 \quad \$1,380.00 \\
 + 2,400.00 \quad \underline{46000} \\
 \$6,540.00 \quad \$5,520.00 \quad \$85.00 \\
 - 5,520.00 \quad 12 \overline{) \$1,020.00} \\
 \hline
 \$1,020.00 \quad \begin{array}{r} 96 \\ 60 \ 00 \\ 60 \ 00 \end{array}
 \end{array}$$

Section 16.
Part 16a.
Exercise 1.

Unit 5.

Unit 5, Section 16.

105

-1. Regular Rate Overtime Rate

\$6.20	\$9.30
\$6.64	\$9.96
\$5.58	\$8.37
\$8.75	\$13.12
\$6.33	\$9.49
\$5.87	\$8.80

-2.

	Name	Hour Rate	Hours Worked	Total Wages
a.	Judy Banks	\$5.60	42	\$240.80
b.	Ellen Fisk	6.00	46	294.00
c.	Lucy Jerki	6.40	48	332.80
d.	Jess Lane	6.50	43	289.25
e.	Viola Morse	5.90	45	280.25
f.	Alice Noyes	6.10	50	335.50
g.	Ben Shen	6.35	41	263.20
h.	Luz Vega	5.97	42	256.70

-3.

	Cosco Employees	Hours Worked					Hour Rate	Total Hours		Total Wages
		M	T	W	T	F		Reg.	O.T.	
a.	C. D. Aubrey	8	8	7	10	9	\$5.00	39	3	\$217.50
b.	R. A. Lee	9	10	10	8	8	6.40	40	5	244.00
c.	J. N. Orr	7	8	9	8	10	5.40	39	3	234.90
d.	P. L. Dent	10	9	9	9	8	6.80	40	5	363.00
e.	A. C. Chen	6	10	8	7	8	7.00	37	2	280.00
f.	H. H. Hale	11	8	8	7	10	7.60	39	5	353.40
g.	H. N. Diaz	8	11	8	9	8	5.75	40	4	264.48

Unit 5.

Section 16.

Part 16b.

Exercises 2-5.

106

$$\begin{array}{ll}
 2-1. \quad \frac{3}{4} \times 48 = \frac{3}{4} \times \frac{48}{1} = 36 & 2-2. \quad \frac{2}{3} \times 33 = \frac{2}{3} \times \frac{33}{1} = 22 \\
 2-3. \quad \frac{3}{4} \times 40 = \frac{3}{4} \times \frac{40}{1} = 30 & 2-4. \quad \frac{3}{5} \times 30 = \frac{3}{5} \times \frac{30}{1} = 18 \\
 2-5. \quad \frac{4}{5} \times 20 = \frac{4}{5} \times \frac{20}{1} = 16 & 2-6. \quad \frac{3}{8} \times 32 = \frac{3}{8} \times \frac{32}{1} = 12 \\
 2-7. \quad 24 \times \frac{3}{4} = \frac{24}{1} \times \frac{3}{4} = 18 & 2-8. \quad 18 \times \frac{5}{6} = \frac{18}{1} \times \frac{5}{6} = 15 \\
 2-9. \quad \frac{6}{5} \times 15 = \frac{6}{5} \times \frac{15}{1} = 18 & 2-10. \quad \frac{5}{3} \times 18 = \frac{5}{3} \times \frac{18}{1} = 30 \\
 2-11. \quad \frac{7}{4} \times 16 = \frac{7}{4} \times \frac{16}{1} = 28 & 2-12. \quad \frac{4}{3} \times 18 = \frac{4}{3} \times \frac{18}{1} = 24 \\
 2-13. \quad \frac{7}{8} \times 24 = \frac{7}{8} \times \frac{24}{1} = 21 & 2-14. \quad \frac{2}{3} \times \$30 = \frac{2}{3} \times \frac{\$30}{1} = \$20 \\
 2-15. \quad \frac{5}{8} \times \$48 = \frac{5}{8} \times \frac{\$48}{1} = \$30 & 2-16. \quad \frac{5}{6} \times 54 = \frac{5}{6} \times \frac{54}{1} = 45
 \end{array}$$

$$\begin{array}{ll}
 3-1. \quad \frac{1}{3} \times \$249.20 = \frac{1}{3} \times \frac{\$249.20}{1} = \$83.15 \\
 3-2. \quad \frac{1}{4} \times \$216 = \frac{1}{4} \times \frac{\$216}{1} = \$54 \\
 3-3. \quad \frac{1}{2} \times \$209.60 = \frac{1}{2} \times \frac{\$209.60}{1} = \$104.80
 \end{array}$$

$$\begin{array}{ll}
 4-1. \quad \$24 + \frac{1}{6} \text{ of } \$24 = \$24 + \$6 = \$30. \\
 4-2. \quad \$36 + \frac{1}{6} \text{ of } \$36 = \$36 + \$6 = \$42. \\
 4-3. \quad \$32 + \frac{1}{8} \text{ of } \$32 = \$32 + \$4 = \$36. \\
 4-4. \quad \$25 + \frac{1}{5} \text{ of } \$25 = \$25 + \$5 = \$30. \\
 4-5. \quad \$28 + \frac{1}{4} \text{ of } \$28 = \$28 + \$7 = \$35. \\
 4-6. \quad \$36 - \frac{1}{6} \text{ of } \$36 = \$36 - \$6 = \$30. \\
 4-7. \quad \$30 - \frac{1}{3} \text{ of } \$30 = \$30 - \$10 = \$20. \\
 4-8. \quad \$28 - \frac{1}{4} \text{ of } \$28 = \$28 - \$7 = \$21. \\
 4-9. \quad \$21 - \frac{1}{3} \text{ of } \$21 = \$21 - \$7 = \$14. \\
 4-10. \quad \$32 - \frac{1}{8} \text{ of } \$32 = \$32 - \$4 = \$28. \\
 4-11. \quad \$30 + \frac{1}{6} \text{ of } \$30 = \$30 + \$5 = \$35. \\
 4-12. \quad \$30 - \frac{1}{6} \text{ of } \$30 = \$30 - \$5 = \$25.
 \end{array}$$

$$\begin{array}{ll}
 5-1. \quad \$214.80 + \frac{1}{5} \text{ of } \$214.80 = \$214.80 + \$42.96 = \$257.76 \\
 5-2. \quad \$5.40 + \frac{1}{4} \text{ of } \$5.40 = \$5.40 + \$1.35 = \$6.75 \\
 5-3. \quad \$226 - \frac{1}{5} \text{ of } \$226 = \$226.00 - \$45.20 = \$180.80 \\
 5-4. \quad \$6.24 - \frac{1}{8} \text{ of } \$6.24 = \$6.24 - \$0.78 = \$5.46 \\
 5-5. \quad \$16,568 - \frac{1}{8} \text{ of } \$16,568 = \$16,568 - \$2,071 = \$14,497
 \end{array}$$

Section 16.

Unit 5.

Part 16b - Review Assignment 16b.

Exercises 6-7 (for Part 16b)

and Exercises 1-2 (for Review Assignment 16b).

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6-1. 5 is $\frac{5}{12}$ of 12; 5 is $\frac{5}{9}$ of 9; 5 is $\frac{5}{8}$ of 8;
5 is $\frac{5}{6}$ of 6; 5 is $\frac{1}{4}$ of 4; 5 is $1\frac{2}{3}$ of 3; 5 is $2\frac{1}{2}$ of 2.

6-2. 8 is $\frac{8}{15}$ of 15; 8 is $\frac{8}{13}$ of 13; 8 is $\frac{8}{11}$ of 11;
8 is $\frac{8}{9}$ of 9; 8 is $1\frac{1}{7}$ of 7; 8 is $1\frac{3}{5}$ of 5; 8 is $2\frac{2}{3}$ of 3.

6-3. 12 is $\frac{1}{3}$ of 36; 12 is $\frac{1}{2}$ of 24; 12 is $\frac{3}{4}$ of 16;
12 is $1\frac{5}{7}$ of 7; 12 is $2\frac{2}{5}$ of 5; 12 is $1\frac{1}{3}$ of 9; 12 is $1\frac{1}{3}$ of 8.

6-4. 3 is $\frac{1}{4}$ of 12; 4 is $\frac{1}{3}$ of 12; 11 is $\frac{11}{12}$ of 12;
13 is $1\frac{1}{12}$ of 12; 17 is $1\frac{5}{12}$ of 12; 15 is $1\frac{1}{4}$ of 12; 16 is $1\frac{1}{3}$ of 12.

6-5. 3 is $\frac{1}{8}$ of 24; 8 is $\frac{1}{3}$ of 24; 36 is $1\frac{1}{2}$ of 24;
24 is 1 of 24; 6 is $\frac{1}{4}$ of 24; 30 is $1\frac{1}{4}$ of 24; 4 is $\frac{1}{6}$ of 24.

6-6. 5 is $\frac{1}{3}$ of 15; 12 is $\frac{4}{5}$ of 15; 20 is $1\frac{1}{3}$ of 15;
3 is $\frac{1}{5}$ of 15; 10 is $\frac{2}{3}$ of 15; 18 is $1\frac{1}{3}$ of 15; 6 is $\frac{2}{5}$ of 15.

7-1. \$30 is $\frac{1}{7}$ of \$210. 7-2. \$30 is $\frac{1}{8}$ of \$240

7-3. \$25 is $\frac{1}{12}$ of \$300.

a. $2\frac{1}{3} = 2\frac{2}{6}$

$4\frac{1}{6} = 4\frac{1}{6}$

$+3\frac{1}{2} = +3\frac{3}{6}$

$9\frac{6}{6} = 10$

b. $19 \div \frac{3}{8} = \frac{19}{1} \times \frac{8}{3} = \frac{152}{3} = 50\frac{2}{3}$

c. $5\frac{1}{3} \div \frac{3}{4} = \frac{16}{3} \times \frac{4}{3} = \frac{64}{9} = 7\frac{1}{9}$

d. \$1,400 is $\frac{3}{8}$ of \$525

e. $\$196 + \frac{1}{4}$ of \$196 = \$196 + \$49 = \$245

1. \$2.676 = \$2.68

$17 \overline{) 43,500}$

34

115

102

130

119

110

102

8

g. 50.0cm

25.0cm

+ 0.2cm

75.2cm

2. $\begin{array}{r} 2 \\ \$5.70 \end{array}$ $\begin{array}{r} 3 \\ \$5.70 \end{array}$ $\begin{array}{r} 2 \quad 2 \\ \$8.55 \end{array}$

$\times 40$ $\times 1.5$ $\times 5$

\$228.00 2850 \$42.75

570 +228.00

\$8.550 \$270.75

Section 17,
Part 17a,
Exercises 1-3,

Unit 5.

Section 17,

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	Total Wages	With. Allowances	With. Tax
1-1.	\$200.00	2	\$19.50
1-2.	205.00	2	19.50
1-3.	210.00	2	21.30
1-4.	220.00	2	23.10
1-5.	220.00	4	17.90
1-6.	203.00	1	22.10
1-7.	224.00	5	15.30
1-8.	225.10	2	23.10
1-9.	234.60	5	17.10
1-10.	240.05	1	29.60
1-11.	209.86	5	11.70
1-12.	235.10	7	11.90
1-13.	215.00	1	23.90
1-14.	230.00	0	30.60
1-15.	246.50	3	24.10
1-16.	224.00	9	7.50
1-17.	240.00	10	6.00
1-18.	248.75	6	16.30

2-1.	\$202.68 - \$12.42	2-2.	\$203.71 - \$12.49
2-3.	\$223.75 - \$13.72	2-4.	\$224.53 - \$13.76
2-5.	\$228.80 - \$14.03	2-6.	\$233.86 - \$14.34
2-7.	\$234.02 - \$14.35	2-8.	\$234.95 - \$14.40

No.	Name	allow- ances	Total Wages	Deductions			Net Wages
				Inc. Tax	FICA Tax	Total	
a.	Bell, J. R.	2	\$213.00	\$21.30	\$13.06	\$34.36	\$178.64
b.	Carter, A. L.	4	224.20	17.90	13.74	31.64	192.56
c.	Dore, K. M.	5	212.91	13.50	13.05	26.55	186.36
d.	Esty, V. R.	3	233.75	17.10	14.33	31.43	202.32
e.	Totals		\$883.86	\$69.80	\$54.18	\$123.98	\$759.88

Unit 5.

Section 17.

Part 17a - Review Assignment 17a.

Exercises 3 (for Part 17a),

and Exercise 1 (for Review Assignment 17a).

110

3-2. a. \$203.00	b. \$225.00	c. \$240.00
$\times .0613$	$\times .0613$	$\times .0613$
<u>160900</u>	<u>67500</u>	<u>72000</u>
20300	22500	24000
<u>121800</u>	<u>135000</u>	<u>144000</u>
\$12,443.90	\$13,792.50	\$14,712.00
= \$12.44	= \$13.79	= \$14.71

3-3. $\begin{matrix} 3 & 2 \\ \$5.76 \end{matrix}$	$\begin{matrix} 3 & 2 \\ \$5.76 \end{matrix}$	$\begin{matrix} 2 & 1 \\ \$8.64 \end{matrix}$	\$230.40	\$264.96
$\times 40$	$\times 1.5$	$\times 4$	$+ 38.56$	$- 74.20$
<u>\$230.40</u>	<u>2880</u>	<u>\$34.56</u>	\$264.96	\$190.76
	<u>576</u>			
	\$8.640			

3-4. \$6.00	\$6.00	\$240.00	\$19.13
$\times 40$	$\times 1.5$	$\times 8$	$+ 92.00$
<u>\$240.00</u>	<u>3000</u>	<u>\$192.00</u>	<u>37.00</u>
	<u>600</u>	\$312.00	10.00
	\$9.00		$+ 3.25$
			\$70.28

\$312.00 - \$70.28 = \$241.72

3-5. 9	\$7.20	\$7.20	\$10.80	\$280.80	\$20.52
8	$\times 39$	$\times 1.5$	$\times 5$	$+ 54.00$	38.80
10	<u>6480</u>	<u>3600</u>	<u>\$54.00</u>	<u>\$334.80</u>	<u>+ 6.25</u>
7	<u>2160</u>	<u>720</u>			<u>\$65.57</u>
$+ 10$	<u>\$253.80</u>	<u>\$10.800</u>			
44					

\$334.80 - \$65.57 = \$269.23

Review Assignment
17a.

1. a. $47 \times \frac{2}{3} = \frac{47}{1} \times \frac{2}{3} = \frac{94}{3} = 31\frac{1}{3}$ b. $16\frac{1}{3} \times 12\frac{1}{2} = \frac{49}{3} \times \frac{25}{2} = \frac{1225}{6} = 204\frac{1}{6}$
 c. $4\frac{1}{2} \div \frac{3}{8} = \frac{38}{2} \times \frac{8}{3} = 6$ d. $12 \div 3\frac{3}{4} = \frac{124}{1} \times \frac{4}{15} = \frac{16}{5} = 3\frac{1}{5}$

Section 17,
 Review Assignment 17a.
 Exercises 1-6.

e. $.736 = .74$ f. $\$312 - \frac{1}{4}$ of $\$312$
 $= \$312 \times \frac{1}{4} = \$78;$
 $\$312 - \$78 = \$234$

$$\begin{array}{r} 19 \overline{) 14.000} \\ 133 \\ \hline 70 \\ 57 \\ \hline 130 \\ 114 \\ \hline 16 \end{array}$$

g. $12.8 \text{ m} = 12.800 \text{ m}$
 $- 875 \text{ mm} = - .875 \text{ m}$
 $\hline 11.925 \text{ m}$

2. $\$6.08 \times 40 = \243.20
 $\$6.08 \times 1.5 = 3040$
 $\$9.12 \times 5 = \45.60
 $\$243.20 + 45.60 = \288.80
 $\$288.80 - 89.50 = \199.30

$$\begin{array}{r} 608 \\ \hline \$9.120 \end{array}$$

3. $\$274.60 \times .0613 = \16.83

$$\begin{array}{r} 4 \times 23 \\ \hline \$274.60 \\ \times .0613 \\ \hline 27460 \\ 164760 \\ \hline \$16832980 \\ = \$16.83 \end{array}$$

4. $62 \times 5 = 310$
 $65 \times 6 = 390$
 390

Bob must get a score of 80 on the ninth test.

5. $\$8,240 \times 4 = \$32,960$
 $\$32,960 + 8,840 = \$41,800$

$$\begin{array}{r} 221 \\ \hline \$32,960 \\ \times 4 \\ \hline \$131,840 \end{array}$$

6. $\$5,126 \div 6 = \852.1

$$\begin{array}{r} 852.1 \\ 6 \overline{) \$5,126} \\ 48 \\ \hline 31 \\ 30 \\ \hline 12 \\ 12 \\ \hline 6 \\ 6 \\ \hline 0 \end{array}$$

a. $\frac{3}{5} \times 50 = 30$
 b. $28 \times \frac{4}{7} = 16$
 c. $10 + 25 = 35$

Unit 5.

Section 17.

Part 17b - Review Assignment 17b.

Exercises 4-5 (for Part 17b),

and Exercises 1-3 (for Part 17a).

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$$4-1. 15-14=1; \frac{1}{14}, 15-13=2; \frac{2}{13}, 15-11=4; \frac{4}{11}, 15-10=5; \frac{5}{10}=\frac{1}{2}, 15-12=3; \frac{3}{12}=\frac{1}{4}, 15-9=6; \frac{6}{9}=\frac{2}{3}$$

$$4-2. 30-20=10; \frac{10}{30}=\frac{1}{3}, 25-20=5; \frac{5}{25}=\frac{1}{5}, 24-20=4; \frac{4}{24}=\frac{1}{6}, 22-20=2; \frac{2}{22}=\frac{1}{11}, 50-20=30; \frac{30}{50}=\frac{3}{5}, 35-20=15; \frac{15}{35}=\frac{3}{7}$$

$$4-3. 13-12=1; \frac{1}{12}, 17-12=5; \frac{5}{12}, 19-12=7; \frac{7}{12}, 14-12=2; \frac{2}{12}=\frac{1}{6}, 16-12=4; \frac{4}{16}=\frac{1}{4}, 15-12=3; \frac{3}{15}=\frac{1}{5}$$

$$4-4. 15-14=1; \frac{1}{14}, 15-13=2; \frac{2}{13}, 15-11=4; \frac{4}{11}, 15-10=5; \frac{5}{10}=\frac{1}{2}, 15-12=3; \frac{3}{15}=\frac{1}{5}, 15-9=6; \frac{6}{15}=\frac{2}{5}$$

$$4-5. 14-10=4; \frac{4}{10}=\frac{2}{5}, 24-18=6; \frac{6}{24}=\frac{1}{4}$$

$$5-1. \$240 - \$200 = \$40; \frac{40}{200} = \frac{2}{10} = \frac{1}{5}$$

$$5-2. \$250 - \$225 = \$25; \frac{25}{250} = \frac{1}{10}$$

$$5-3. 210 - 180 = 30; \frac{30}{180} = \frac{1}{6}$$

Review Assignment 17a

1. net or take-home pay: (a) Gross pay less deductions, (b) (f) Time above the regular time.

regular time: (c) Straight time.

social security tax: (d) FICA tax.

wage: (e) Hourly rate pay for less or more.

withholding tax: (h) Federal income tax.

$$2. a. 23 \div \frac{2}{3} = \frac{23}{1} \times \frac{3}{2} = \frac{69}{2} = 34\frac{1}{2}, 6\frac{2}{3} \div \frac{4}{5} = \frac{20}{3} \times \frac{5}{4} = \frac{25}{3} = 8\frac{1}{3}$$

$$c. 15 \div 1\frac{2}{3} = \frac{15}{1} \times \frac{3}{5} = 9, d. 1\frac{3}{5} \div 1\frac{1}{3} = \frac{8}{5} \times \frac{3}{4} = \frac{6}{5} = 1\frac{1}{5}$$

$$e. \$216 - \$180 = \$36; \frac{36}{180} = \frac{1}{5}$$

$$f. \$270 - \$225 = \$45; \frac{45}{270} = \frac{1}{6}$$

$$g. 0.75 \text{ km}$$

$$3. \$887.25 \quad \$221.81\frac{1}{4} = \$221.81$$

$$\begin{array}{r} \times 12 \\ 177450 \\ 88725 \\ \hline \end{array}$$

$$\$10,647.00$$

$$4) \$887.25$$

$$\begin{array}{r} \times 24 \\ 300 \\ 150 \\ \hline 18.00 \text{ km} \end{array}$$

Section 17.
 Review-Assignment 17b.
 Exercises 4-9.

$$\begin{array}{r}
 4. \quad \begin{array}{r} \overset{1}{8} \overset{1}{8} \\ 8 \times 38 \\ \hline 6 \quad 4352 \\ 10 \quad 1632 \\ \hline +10 \quad \$206.72 \end{array} \quad \begin{array}{r} \overset{2}{5} \overset{2}{4} \\ 5.44 \times 1.5 \\ \hline 6 \quad 2720 \\ \hline +10 \quad \$8.160 \end{array} \quad \begin{array}{r} \overset{2}{8} \overset{1}{6} \\ 8.16 \times 4 \\ \hline 10 \quad 32.64 \\ \hline +10 \quad \$32.64 \end{array} \quad \begin{array}{r} \overset{1}{206.72} \\ 206.72 + 32.64 \\ \hline 239.36 \end{array}
 \end{array}$$

$$\begin{array}{r}
 5. \quad \begin{array}{r} \overset{1}{3} \overset{2}{2} \\ \$328.00 \times .0613 \\ \hline 196800 \\ \hline +10 \quad 298400 \\ \hline 32800 \\ \hline +10 \quad 196800 \\ \hline \$20,106.400 \end{array} \quad \begin{array}{r} \overset{1}{20.11} \\ 20.11 \times 59.20 \\ \hline 1198400 \\ \hline +10 \quad 3.50 \\ \hline \$82.81 \end{array} \quad \begin{array}{r} \overset{2}{3} \overset{2}{2} \overset{1}{0} \overset{1}{0} \\ 328.00 - 82.81 \\ \hline 245.19 \\ \hline +10 \quad 245.19 \\ \hline \$245.19 \end{array}
 \end{array}$$

7. Louise's share:
 \$12,930
 (2 x \$6,465 = \$12,930)
 Patricia's share:
 \$6,465
 (1 x \$6,465 = \$6,465)
 (\$12,930 + \$6,465 = \$19,395)

$$\begin{array}{r}
 6. \quad \begin{array}{r} \overset{1}{30,484} \\ +26,516 \\ \hline \$57,000 \\ -48,790 \\ \hline \$8,210 \end{array} \quad \begin{array}{r} \overset{2}{28,375} \\ -8,210 \\ \hline \$20,165 \end{array} \quad \begin{array}{r} \overset{1}{8,210} \\ -2,109 \\ \hline \$6,101 \end{array}
 \end{array}$$

$$\begin{array}{r}
 8. \quad \begin{array}{r} \overset{1}{2.4} \overset{1}{m} \\ \times 3.6 \overset{1}{m} \\ \hline 144 \\ 72 \\ \hline 8.64 \overset{2}{m^2} \end{array} \quad \begin{array}{r} \overset{5}{6} \overset{3}{9} \overset{5}{5} \\ 6.95 \times 6 \\ \hline 41.70 \end{array} \quad \begin{array}{r} \overset{1}{4} \overset{1}{9} \overset{5}{5} \\ 4.95 \times 20 \\ \hline 99.00 \end{array} \quad \begin{array}{r} \overset{2}{3} \overset{5}{5} \overset{0}{0} \\ 3.50 \times 14 \\ \hline 49.00 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{r} \overset{1}{41.70} \\ +49.00 \\ \hline \$90.70 \end{array} \quad \begin{array}{r} \overset{8}{9} \overset{10}{0} \overset{7}{0} \\ 99.00 - 90.70 \\ \hline \$8.30 \end{array}
 \end{array}$$

Unit 5.

Section 18.

Part 18a.

Exercises 1-2.

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Section 18.

	In	Out	No. Hours		In	Out	No. Hours
1-1.	7:58	12:00	4	1-9.	1:05	3:46	$2\frac{1}{2}$
1-2.	8:00	12:06	4	1-10.	9:20	11:59	$2\frac{1}{4}$
1-3.	7:50	12:02	4	1-11.	1:50	4:45	$2\frac{3}{4}$
1-4.	8:01	12:05	$3\frac{3}{4}$	1-12.	8:27	12:02	$3\frac{1}{2}$
1-5.	12:55	5:03	4	1-13.	1:00	5:07	4
1-6.	12:44	4:55	$3\frac{3}{4}$	1-14.	8:16	12:03	$3\frac{1}{2}$
1-7.	1:03	5:03	$3\frac{3}{4}$	1-15.	12:58	4:40	$3\frac{1}{2}$
1-8.	12:56	4:00	3	1-16.	7:52	11:48	$3\frac{3}{4}$

2-1	In	Out	In	Out	In	Out	No. Hours
Mon.	8:00	12:02	12:01	4:00			$2\frac{1}{4}$
Tues.	7:58	11:53	12:02	4:30			$7\frac{3}{4}$
Wed.	7:56	12:01	12:31	4:35			8
Thurs.	7:57	12:01	12:32	4:30	5:00	8:00	11
Fri.	7:57	11:58	12:42	4:00			$7\frac{1}{4}$
							<u>42</u>

\$5.00	\$5.00	\$7.50	\$195.00
$\times 39$	$\times 1.5$	$\times 3$	$+ 22.50$
45.00	25.00	\$22.50	\$217.50
15.00	5.00		
\$195.00	\$7.500		

2-2.	In	Out	In	Out	In	Out	No. Hours
Mon.	7:54	12:01	1:00	4:55			$7\frac{3}{4}$
Tues.	7:55	12:00	12:35	5:00	6:00	13:00	12
Wed.	7:58	12:03	12:38	4:30			$7\frac{1}{2}$
Thurs.	8:00	12:04	1:00	4:40			$7\frac{1}{2}$
Fri.	8:04	12:02	12:57	4:00			$6\frac{3}{4}$
							<u>41\frac{1}{2}</u>

$$\begin{aligned}
 &\$8.00 \times 37.5 = \$300.00 & \$8.00 \times 1.5 = \$12.00 \\
 &\$12.00 \times 4 = \$48.00 & \$300.00 + \$48.00 = \$348.00
 \end{aligned}$$

Section 18.

Part 18a - Review Assignment 18a.

Exercise 3 (for Part 18a),

and Exercises 12 (for Review Assignment 18a).

1.	Name	Number of Pieces					Total Pieces	Rate Per Piece	Total Earnings
		M	T	W	T	F			
a.	Casey, L. V.	62	66	58	70	64	320	\$.75	\$240.00
b.	Valle, M. N.	26	24	27	29	22	128	1.80	230.40
c.	Pirras, R. J.	54	60	58	52	56	280	.90	252.00
d.	Pelle, R. V.	35	38	34	37	36	180	1.15	207.00
e.	Andres, J. L.	42	41	40	37	40	200	1.12 $\frac{1}{2}$	225.00

2.	Name	Number of Dozen					Total Dozen	Rate Per Dozen	Total Wages
		M	T	W	T	F			
a.	Amaro, J.	12	11	11	10	8	52	\$4.74	\$246.48
b.	Cooper, R.	9	10	10	8 $\frac{4}{12}$	7 $\frac{10}{12}$	45 $\frac{2}{12}$	4.86	219.51
c.	Vester, S.	7	11	10	6 $\frac{8}{12}$	7 $\frac{5}{12}$	42 $\frac{1}{12}$	5.40	227.25
d.	O'Hara, M.	7	8	6 $\frac{9}{12}$	6 $\frac{7}{12}$	8	36 $\frac{4}{12}$	6.69	243.07

3. a. Aldo: $42 \times \$50.40 = 50.40$
 b. Webb: $45 \times \$54.00 = 54.00$
 c. Cheng: $50 \times \$60.00 = 60.00$
 d. Pont: $55 \times \$66.25 = 66.25$
 e. Blake: $58 \times \$70.00 = 70.00$
 f. Malis: $60 \times \$72.50 = 72.50$
 g. Page: $63 \times \$76.40 = 76.40$
 h. Puss: $64 \times \$77.70 = 77.70$
 i. Vogel: $61 \times \$73.80 = 73.80$

piece: (c) An item produced.

piecerate: (a) A wage rate based on production.

timecard: (b) A record of a worker's time.

time clock: (d) A device used to stamp a timecard.

$$a. \frac{2}{3} \div \frac{5}{8} = \frac{2}{3} \times \frac{8}{5} = \frac{16}{15} = 2\frac{2}{3} \quad b. \frac{1}{9} \div \frac{2}{3} = \frac{1}{9} \times \frac{3}{2} = \frac{1}{6}$$

Unit 5.

Section 18.

Review Assignment 18a.

Exercises 2-7.

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Review Assignment 18a (continued)
Exercise 2 (continued)

c. $\$228 - \$152 = \$76$; $\frac{76}{228} = \frac{1}{3}$.

d. $\frac{3636}{11} = 364$ $60 \text{ cm} = .6 \text{ m}$

$$\begin{array}{r} 11 \overline{) 4.0000} \\ 33 \\ \hline 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 33 \\ \hline 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 40 \\ 33 \\ \hline 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 33 \\ \hline 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 70 \\ 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 66 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 4 \end{array}$$

$$\begin{array}{r} 3.162 \\ 158 \\ \hline 174 \\ 169 \\ \hline + 168 \\ 831 \end{array}$$

$$\begin{array}{r} 158 \\ \hline 174 \\ 169 \\ \hline + 168 \\ 831 \end{array}$$

$$\begin{array}{r} 174 \\ 169 \\ \hline + 168 \\ 831 \end{array}$$

$$\begin{array}{r} 169 \\ \hline + 168 \\ 831 \end{array}$$

$$\begin{array}{r} + 168 \\ 831 \end{array}$$

$$\begin{array}{r} 831 \end{array}$$

$$\begin{array}{r} 831 \\ - 21 \\ \hline 810 \end{array}$$

$$\begin{array}{r} - 21 \\ \hline 810 \end{array}$$

$$\begin{array}{r} 810 \end{array}$$

$$\begin{array}{r} 810 \\ \times 27\frac{1}{2} \\ \hline 405 \\ 5670 \\ \hline 1620 \\ \$222.75 \end{array}$$

$$\begin{array}{r} \times 27\frac{1}{2} \\ \hline 405 \\ 5670 \\ \hline 1620 \\ \$222.75 \end{array}$$

$$\begin{array}{r} 405 \\ 5670 \\ \hline 1620 \\ \$222.75 \end{array}$$

$$\begin{array}{r} 5670 \\ \hline 1620 \\ \$222.75 \end{array}$$

$$\begin{array}{r} 1620 \\ \hline \$222.75 \end{array}$$

$$\begin{array}{r} \$222.75 \end{array}$$

$$\begin{array}{r} 4.87 \\ 90 \\ 98 \\ \hline + 82 \\ 357 \end{array}$$

$$\begin{array}{r} 90 \\ \times 5 \\ \hline 450 \end{array}$$

$$\begin{array}{r} 450 \\ - 357 \\ \hline 93 \end{array}$$

$$\begin{array}{r} 93 \end{array}$$

Nancy must get a score of 93 to average 90 on all five tests.

$$\begin{array}{r} 5. \$230.75 \\ 4 \overline{) \$923.00} \end{array}$$

$$\begin{array}{r} 6. \$4,485 \\ \times 11 \\ \hline 4485 \\ 4485 \\ \hline \$49,335 \end{array}$$

$$\begin{array}{r} \$4,550 \\ \times 12 \\ \hline 9100 \\ 4550 \\ \hline \$54,600 \end{array}$$

$$\begin{array}{r} 7. \$25.50 \\ \times 10 \\ \hline \$255.00 \end{array}$$

$$\begin{array}{r} \$18.75 \\ \times 30 \\ \hline \$562.50 \end{array}$$

$$\begin{array}{r} \$12.95 \\ \times 40 \\ \hline \$518.00 \end{array}$$

$$\begin{array}{r} \$518.00 \\ + 562.50 \\ \hline \$1,080.50 \end{array}$$

$$\begin{array}{r} \$1,080.50 \\ - 801.00 \\ \hline \$279.50 \end{array}$$

$$\begin{array}{r} \$279.50 \end{array}$$

$$\begin{array}{r} \$255.00 \\ + 562.50 \\ \hline \$817.50 \end{array}$$

$$\begin{array}{r} \$817.50 \\ - 534.50 \\ \hline \$283.00 \end{array}$$

$$\begin{array}{r} \$283.00 \end{array}$$

$$\begin{array}{r} \$283.00 \end{array}$$

The next most must turn on to be \$5,265

$$\begin{array}{r} \$6,681.25 \\ 80 \overline{) \$534,500.00} \end{array}$$

$$\begin{array}{r} \$534,500.00 \\ - 801.00 \\ \hline \$533,699.00 \end{array}$$

Section 18.

Review Assignment 18a + Part 18b.

Exercises 8-9 (for Review Assignment 18a),
and Exercises 4-6 (for Part 18b).

8. a. $7 \times 35 = 245$ b. $\frac{3}{4} \times 64 = 48$
 c. $27 = 243 \div 9$

Checkbook balance:		\$ 951.21
Less:		
Service charge	\$ 1.85	
Check not recorded	17.82	19.67
Sub-total:		931.54
Add: Amount on check stub (too large)		5.00
Correct checkbook balance:		\$ 936.54

4-1. 8 is $\frac{2}{3}$ as much as 20. (should)4-2. 18 is $\frac{2}{3}$ as much as 27. (should not)4-3. 24 is $\frac{3}{4}$ smaller than 96. (should not)4-4. \$32 is $\frac{4}{5}$ of \$40. (should)4-5. \$45 is $\frac{3}{5}$ of \$75. (should not)4-6. $\frac{2}{3}$ of \$72 is \$48. (should not)4-7. $\frac{3}{5}$ of \$45 is \$27. (should)4-8. \$40 is $\frac{1}{3}$ greater than \$30. (should)4-9. $\frac{2}{3}$ of 125 equals 50. (should not)5-1. 20 is $\frac{2}{5}$ of 50. 5-2. $\frac{2}{5}$ of \$25 is \$10.5-3. $\frac{2}{3}$ of 45 is 27. 5-4. $\$48 \times \frac{3}{4}$ is \$36.5-5. $\frac{4}{5} \times \$20$ is \$16. 5-6. 60 is $\frac{4}{3}$ of 45.5-7. 30 is $\frac{2}{3}$ as much as 75. 5-8. \$18 is $\frac{3}{4}$ as much as \$24.5-9. 18 is $\frac{2}{3}$ as large as 27. 5-10. \$50 is $\frac{5}{4}$ of \$40.5-11. 8 is $\frac{1}{5}$ of 40. 5-12. $\frac{3}{4}$ of $\$21.33\frac{1}{3}$ is $\frac{2}{3}$ of \$18.5-1. a. \$256 ($\frac{1}{8}$ of \$256 is \$32).

b. \$288 (\$256 + \$32 = \$288).

5-2. a. \$192 ($\frac{4}{5}$ of \$240 is \$192).

b. \$48 (\$192 + \$48 = \$240).

Unit 5.

Section 18.

Part 18b.

Exercises 6-9.

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Exercises 6
(continued).

6-3. $\$213.00 \div 3 = \71.00 ; $\$71.00 \times 4 = \284.00 .

6-4. a. $\$25.00 \times 8 = \200.00 .

b. $\$25.00 + \$200.00 = \$225.00$.

7-1. $\frac{3}{3} + \frac{1}{3} = \frac{4}{3}$; $24 \div \frac{4}{3} = 24 \times \frac{3}{4} = \frac{72}{4} = 18$

7-2. $\frac{4}{4} - \frac{1}{4} = \frac{3}{4}$; $36 \div \frac{3}{4} = 36 \times \frac{4}{3} = \frac{144}{3} = 48$

7-3. $\frac{3}{3} + \frac{2}{3} = \frac{5}{3}$; $45 \div \frac{5}{3} = 45 \times \frac{3}{5} = \frac{135}{5} = 27$

7-4. $\frac{6}{6} - \frac{1}{6} = \frac{5}{6}$; $60 \div \frac{5}{6} = 60 \times \frac{6}{5} = \frac{360}{5} = 72$

7-5. $\frac{4}{4} + \frac{3}{4} = \frac{7}{4}$; $28 \div \frac{7}{4} = 28 \times \frac{4}{7} = \frac{112}{7} = 16$

7-6. $\frac{5}{5} - \frac{1}{5} = \frac{4}{5}$; $60 \div \frac{4}{5} = 60 \times \frac{5}{4} = \frac{300}{4} = 75$

7-7. $3 \times 4 = 12$; $\frac{3}{3} - \frac{1}{3} = \frac{2}{3}$; $12 \div \frac{2}{3} = 12 \times \frac{3}{2} = \frac{36}{2} = 18$

7-8. $\frac{1}{3} \times 60 = 20$; $\frac{2}{3} + \frac{2}{3} = \frac{4}{3}$; $20 \div \frac{4}{3} = 20 \times \frac{3}{4} = \frac{60}{4} = 15$

8-1. $\frac{5}{5} + \frac{1}{5} = \frac{6}{5}$; $\$240 \div \frac{6}{5} = \$240 \times \frac{5}{6} = \frac{1200}{6} = \200

8-2. $\frac{8}{8} - \frac{1}{8} = \frac{7}{8}$; $\$210 \div \frac{7}{8} = \$210 \times \frac{8}{7} = \frac{1680}{7} = \240

9-1. 18 is $\frac{2}{3}$ as large as 27. 9-2. 40 is $\frac{1}{4}$ more than 32.

9-3. 36 is $\frac{3}{4}$ as large as 48. 9-4. 20 is $\frac{1}{4}$ larger than 16.

9-5. $\frac{2}{3}$ of 24 equals 16. 9-6. 60 is $\frac{1}{3}$ less than 80.

9-7. 48 is $\frac{1}{3}$ larger than 36. 9-8. $\frac{5}{3}$ of 15 is 25.

9-9. 24 is $\frac{3}{8}$ of 64. 9-10. 60 is $\frac{1}{4}$ more than 45.

9-11. 36 is $\frac{1}{2}$ larger than 24. 9-12. $\frac{1}{5}$ less than 50 is 40.

9-13. 63 is $\frac{3}{4}$ larger than 36. 9-14. $\frac{1}{4}$ more than 48 is 60.

9-15. 60 is $\frac{1}{4}$ smaller than 80. 9-16. $\frac{5}{3}$ of 18 equals 30.

9-17. 28 is $\frac{3}{7}$ less than 49. 9-18. $\frac{2}{3}$ of 54 equals 36.

9-19. $\frac{3}{3} - \frac{1}{3} = \frac{2}{3}$; $36 \div \frac{2}{3} = 36 \times \frac{3}{2} = \frac{108}{2} = 54$

9-20. 24 decreased by $\frac{1}{3}$ of itself equals 16.

9-21. 12 is $\frac{4}{5}$ of 15. 9-22. 24 is $\frac{1}{5}$ more than 20.

9-23. $\frac{1}{6}$ less than 36 is 30. 9-24. $\frac{1}{5}$ more than 10 is 12.

9-25. $\frac{1}{3}$ more than 12 is 16. 9-26. 40 is $\frac{1}{10}$ less than 44.

Section 18.

Unit 5.

Part 18b - Review Assignment 18b.

Exercise 10 (for Part 18b),

and Exercises 1-2 (for Review Assignment 18b).

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10-1. \$4.80 is $\frac{3}{4}$ of \$6.40. 10-2. \$14.70 is $\frac{2}{3}$ of \$22.05.

10-3. $\frac{5}{7}$ of \$7.84 equals \$5.60. 10-4. \$5.20 is $\frac{2}{5}$ more than \$3.25.

10-5. \$8.80 is $\frac{3}{8}$ more than \$6.40. 10-6. $\frac{4}{5}$ more than \$1.00 is \$1.80.

10-7. \$32.48 is $\frac{1}{8}$ less than \$37.12. 10-8. $\frac{3}{10}$ less than \$6.00 is \$4.20.

10-9. \$3.52 is $\frac{5}{8}$ more than \$1.92. 10-10. $\frac{3}{8}$ of \$4.80 equals \$3.00.

10-11. \$6.48 is $\frac{1}{3}$ less than \$9.72. 10-12. $\frac{7}{8}$ of \$3.84 equals \$3.36.

10-13. \$10.50 is $\frac{1}{4}$ more than \$8.40. 10-14. \$4.20 is $\frac{2}{5}$ of \$7.00.

10-15. \$2,500 is $\frac{5}{6}$ of \$3,000. 10-16. $\frac{3}{8}$ of \$20.00 is \$7.50.

10-17. 75¢ is $\frac{1}{12}$ of \$9.00. 10-18. 33 is $\frac{2}{9}$ more than 27.

10-19. $\frac{5}{8}$ more than \$4.80 is \$7.80. 10-20. \$20 is $\frac{1}{4}$ less than \$22.50.

10-21. $\frac{3}{20}$ less than \$15 is \$12.75. 10-22. 246 is $\frac{1}{5}$ greater than 205.

10-23. \$396 is $\frac{1}{4}$ smaller than \$462.

1. a. $51 \times \frac{5}{6} = \frac{255}{6} = 42\frac{1}{2}$. b. $9\frac{1}{4} \times 8\frac{2}{3} = \frac{37}{4} \times \frac{26}{3} = \frac{481}{6} = 80\frac{1}{6}$

c. $21 \div \frac{5}{8} = 21 \times \frac{8}{5} = \frac{162}{5} = 32\frac{2}{5}$ d. $7\frac{1}{5} \div 2\frac{1}{4} = \frac{28}{5} \times \frac{4}{9} = \frac{16}{5} = 3\frac{1}{5}$

e. $\frac{2307}{13} = 231$ f. $\$272 + \frac{1}{4}$ of \$272

13) 3.0000

26

40

39

100

91

9

g. $\frac{3421}{9} = 380\frac{1}{9}$

27

37

36

18

18

2. $\begin{array}{r} 23 \\ \$5.68 \\ \times 40 \\ \hline \end{array}$ $\begin{array}{r} 34 \\ \$5.68 \\ \times 15 \\ \hline \end{array}$ $\begin{array}{r} 32 \\ \$8.54 \\ \times 7 \\ \hline \end{array}$ $\begin{array}{r} 1 \\ \$227.20 \\ + 59.78 \\ \hline \end{array}$

\$227.20 $\begin{array}{r} 2840 \\ + 568 \\ \hline \end{array}$ \$59.78 $\begin{array}{r} 286.98 \end{array}$

\$227.20 $\begin{array}{r} 2840 \\ + 568 \\ \hline \end{array}$ \$59.78 $\begin{array}{r} 286.98 \end{array}$

\$227.20 $\begin{array}{r} 2840 \\ + 568 \\ \hline \end{array}$ \$59.78 $\begin{array}{r} 286.98 \end{array}$

\$227.20 $\begin{array}{r} 2840 \\ + 568 \\ \hline \end{array}$ \$59.78 $\begin{array}{r} 286.98 \end{array}$

Unit 5.

Section 18.

Project-Assignment 18.b.

Example 3-11.

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Page: Assign
not collected

$$\begin{array}{r}
 2. \$312.58 \\
 \times .0613 \\
 \hline
 1913744 \\
 31258 \\
 \hline
 127428 \\
 \hline
 \$19155024
 \end{array}$$

8. $\frac{3}{4} \times 56 = 42$

500.00 B
 9. 0.25 L
 $\times \$.39$
225
75
 \$.0975 L
 = \$.10
 $\$.10 - \$.09 = \$.01$

10. $\$220 + \frac{1}{4} \text{ of } \$220 = \$220 + \$55 = \$275$

11. $\$200 - \frac{1}{5} \text{ of } \$200 = \$200 - \$40 = \$160$

Sections 18-19.

Unit 5.

Review Assignment 18b - Part 19a - Part 19b.

Exercise 12 (for Review Assignment 18b),

Exercise 1 (for Part 19a),

and Exercise 2 (for Part 19b).

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12. \$ 46,50	\$ 75,00	\$ 75,00	\$ 4,650,00
X 100	X 100	X 80	+ 2,450,00
\$ 4,650,00	\$ 7,500,00	\$ 6,000,00	\$ 7,100,00

\$ 7,100,00	\$ 55,00
- 6,000,00	20) \$ 1,100,00
\$ 1,100,00	100
	100 00
	100 00

Section 19.

1-1. \$270 is $\frac{9}{40}$ of \$1,200. \$180 is $\frac{3}{20}$ of \$1,200.
 \$300 is $\frac{1}{4}$ of \$1,200. \$240 is $\frac{1}{5}$ of \$1,200.
 \$120 is $\frac{1}{10}$ of \$1,200. \$90 is $\frac{3}{40}$ of \$1,200.
 $\frac{9}{40} + \frac{3}{20} + \frac{1}{4} + \frac{1}{5} + \frac{1}{10} + \frac{3}{40} = \frac{9}{40} + \frac{6}{40} + \frac{10}{40} + \frac{8}{40} + \frac{4}{40} + \frac{3}{40} = 1$.

1-2. $\frac{3}{10} + \frac{1}{5} + \frac{3}{20} + \frac{1}{4} = \frac{6}{20} + \frac{4}{20} + \frac{3}{20} + \frac{5}{20} = \frac{18}{20}$; $\frac{20}{20} - \frac{18}{20} = \frac{2}{20} = \frac{1}{10}$.

1-3. $\frac{1}{4}$ of \$12,800 = \$3,200. $\frac{1}{8}$ of \$12,800 = \$1,600.
 $\frac{3}{16}$ of \$12,800 = \$2,400. $\frac{7}{32}$ of \$12,800 = \$2,800.
 $\frac{1}{8}$ of \$12,800 = \$1,600. $\frac{3}{32}$ of \$12,800 = \$1,200.
 \$3,200 + \$1,600 + \$2,400 + \$2,800 + \$1,600 + \$1,200 = \$12,800.

1-4. $\frac{11}{25}$ of \$5,000 = \$2,200. $\frac{3}{10}$ of \$5,000 = \$1,500.
 $\frac{3}{50}$ of \$5,000 = \$300. $\frac{2}{25}$ of \$5,000 = \$400.
 $\frac{2}{25}$ of \$5,000 = \$600.
 \$2,200 + \$1,500 + \$300 + \$400 + \$600 = \$5,000.

2-1. a. $\frac{35}{100} = .35$ b. $\frac{159}{1,000} = .159$ 2-2. a. $\frac{9}{10} = .9$

b. $\frac{89}{1,000} = .089$ 2-3. a. $\frac{68}{100} = .68$ b. $\frac{1}{10} = .1$

2-4. a. $\frac{19}{1,000} = .019$ b. $\frac{5}{1,000} = .005$ 2-5. $\frac{1}{100} = .01$

b. $\frac{3}{1,000} = .003$ 2-6. a. $\frac{8}{1,000} = .008$ b. $\frac{6}{100} = .06$

2-7. a. $\frac{237}{10,000} = .0237$ b. $\frac{1}{10,000} = .0001$

Unit 5.

Section 19.

Part 19b - Review Assignment + 19b.

Exercises 3-4 (for Part 19b),

and Exercises 1-5 (for Review Assignment 19b).

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$$3-1. \quad a. \frac{6}{7} = .857 \quad b. \frac{8}{9} = .88\overline{8} \quad c. \frac{5}{12} = .41\overline{6}$$

$$d. \frac{8}{11} = .72\overline{7} \quad e. \frac{3}{14} = .21\overline{4} \quad f. \frac{4}{7} = .57\overline{1}$$

$$g. \frac{7}{9} = .77\overline{7} \quad h. \frac{4}{13} = .30\overline{7} \quad i. \frac{6}{15} = .4\overline{6}$$

$$3-2. \quad a. \frac{2}{11} = .18\overline{1} \quad b. \frac{1}{13} = .07\overline{6} \quad c. \frac{8}{13} = .61\overline{5}$$

$$d. \frac{11}{15} = .73\overline{3} \quad e. \frac{2}{15} = .13\overline{3} \quad f. \frac{9}{11} = .81\overline{8}$$

$$g. \frac{5}{17} = .29\overline{4} \quad h. \frac{5}{7} = .71\overline{4} \quad i. \frac{2}{7} = .28\overline{5}$$

$$4. \quad a. \frac{7}{9} = .77\overline{7} \quad b. \frac{6}{11} = .54\overline{5} \quad c. \frac{7}{12} = .58\overline{3}$$

$$d. \frac{8}{13} = .61\overline{5} \quad e. \frac{1}{14} = .07\overline{1} \quad f. \frac{7}{14} = .5$$

$$g. \frac{8}{15} = .53\overline{3} \quad h. \frac{13}{15} = .86\overline{6} \quad i. \frac{7}{13} = .53\overline{8}$$

Review Assignment
Unit 19b:

1. Cash record plus any (c) A number that is not a decimal; (d) Not a number for a decimal fraction; exact value; (a) A quotient that is not rounded.

$$2. \quad a. 2\frac{3}{4} = 2\frac{3}{4} \quad b. 3\frac{2}{3} \div \frac{2}{3} = \frac{10}{3} \times \frac{3}{2} = \frac{27}{2} = 13\frac{1}{2}$$

$$6\frac{1}{2} = 6\frac{1}{2}$$

$$+ 3\frac{1}{2} = + 3\frac{1}{2}$$

$$11\frac{1}{2} = 11\frac{1}{2}$$

$$c. \$162 + \frac{1}{3} \text{ of } \$162 = \$162 + \$54 = \$216$$

$$d. \$216 - \frac{3}{8} \text{ of } \$216 = \$216 - \$81 = \$135$$

$$e. \quad 1.5 \text{ L} = 1.50 \text{ L}$$

$$- 80 \text{ mL} = - .08$$

$$\hline 1.42 \text{ L}$$

$$4. \quad \text{Alma's share: } \$25,650$$

$$(5 \times \$5,130 = \$25,650)$$

$$\text{Suzanne's share: } \$20,520$$

$$(4 \times \$5,130 = \$20,520)$$

$$(\$25,650 + \$20,520 = \$46,170)$$

$$5. \quad \frac{3}{4} \times \$384 = \$288$$

$$3. \quad \$5,333 = \$5,333$$

$$37.5 \overline{) \$200,000}$$

$$1875$$

$$1250$$

$$1125$$

$$1250$$

$$1125$$

$$1250$$

$$1125$$

$$125$$

Section 19.

Review Assignment 19b - Part 19c.

Exercises 6-8 (for Review Assignment 19b),
and Exercises 5-6 (for Part 19c).

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6. 15¢ a kilogram (250 grams = .25 gram; $60¢ \div 4 = 15¢$),7. a. $\frac{5}{6}$ of \$288 equals \$240.b. \$144 increased by $\frac{1}{3}$ of itself gives \$192.

$$\begin{array}{r}
 \begin{array}{r}
 \overset{46}{\$13.50} \\
 \times 12 \\
 \hline
 \$162.00
 \end{array}
 \quad
 \begin{array}{r}
 \overset{36}{\$22.50} \\
 \times 12 \\
 \hline
 \$270.00
 \end{array}
 \quad
 \begin{array}{r}
 \overset{11}{\$19.50} \\
 \times 20 \\
 \hline
 \$390.00
 \end{array}
 \quad
 \begin{array}{r}
 \$390.00 \\
 - 270.00 \\
 \hline
 \$120.00
 \end{array}
 \end{array}$$

Increased; by \$120.00.

5-1. a. $34.9 \times 0.1 = 3.49$ b. $73.4 \times 0.01 = .734$ c. $5.8 \times 0.1 = .58$

d. $62.9 \times 0.01 = .629$ e. $424 \times 0.001 = .424$

5-2. a. $573 \times 0.001 = .573$ b. $819 \times 0.1 = 81.9$ c. $36 \times 0.01 = .36$

d. $7.3 \times 0.001 = .073$ e. $0.82 \times 0.1 = .082$

5-3. a. $6 \times 0.01 = .06$ b. $30 \times 0.001 = .03$ c. $\$372 \times 0.01 = \3.72

d. $\$38.40 \times 0.1 = \3.84 e. $\$930 \times 0.001 = \$.93$

5-1. a. $0.37 = \frac{37}{100}$

c. $0.085 = \frac{85}{1,000} = \frac{17}{200}$

e. $0.075 = \frac{75}{1,000} = \frac{3}{40}$

5-2. a. $0.48 = \frac{48}{100} = \frac{12}{25}$

c. $0.1875 = \frac{1875}{10,000} = \frac{3}{16}$

e. $0.625 = \frac{625}{1,000} = \frac{5}{8}$

5-3. a. $0.028 = \frac{28}{1,000} = \frac{7}{250}$

c. $0.17 = \frac{17}{100}$

e. $0.0276 = \frac{276}{10,000} = \frac{69}{2,500}$

b. $0.85 = \frac{85}{100} = \frac{17}{20}$

d. $0.064 = \frac{64}{1,000} = \frac{8}{125}$

f. $0.125 = \frac{125}{1,000} = \frac{1}{8}$

h. $0.025 = \frac{25}{1,000} = \frac{1}{40}$

d. $0.0375 = \frac{375}{10,000} = \frac{3}{80}$

f. $0.45 = \frac{45}{100} = \frac{9}{20}$

h. $0.325 = \frac{325}{1,000} = \frac{13}{400}$

d. $0.86 = \frac{86}{100} = \frac{43}{50}$

f. $0.148 = \frac{148}{1,000} = \frac{37}{250}$

7-1. a. $0.03\frac{1}{4} = \frac{3\frac{1}{4}}{100} = \frac{3\frac{1}{4} \times 4}{100 \times 4} = \frac{13}{400}$

b. $0.03\frac{1}{3} = \frac{3\frac{1}{3}}{100} = \frac{3\frac{1}{3} \times 3}{100 \times 3} = \frac{10}{300} = \frac{1}{30}$

c. $0.04\frac{3}{4} = \frac{4\frac{3}{4}}{100} = \frac{4\frac{3}{4} \times 4}{100 \times 4} = \frac{19}{400}$

d. $0.833\frac{1}{3} = \frac{833\frac{1}{3}}{1,000} = \frac{833\frac{1}{3} \times 3}{1,000 \times 3} = \frac{2,500}{3,000} = \frac{5}{6}$

e. $0.17\frac{2}{5} = \frac{17\frac{2}{5}}{100} = \frac{17\frac{2}{5} \times 5}{100 \times 5} = \frac{87}{500}$

Unit 5.

Section 19.

Part 19c - Review Assignment 19c,

Exercises 7-8 (for Part 19c),

and Exercises 1-2 (for Review Assignment 19c).

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Exercise 19c

7-2. a. $0.11\frac{2}{3} = \frac{11\frac{2}{3}}{100} = \frac{11\frac{2}{3} \times 3}{100 \times 3} = \frac{35}{300} = \frac{7}{60}$

b. $0.73\frac{1}{3} = \frac{73\frac{1}{3}}{100} = \frac{73\frac{1}{3} \times 3}{100 \times 3} = \frac{220}{300} = \frac{11}{15}$

c. $0.01\frac{2}{5} = \frac{1\frac{2}{5}}{100} = \frac{1\frac{2}{5} \times 5}{100 \times 5} = \frac{2}{500} = \frac{1}{250}$

d. $0.11\frac{2}{5} = \frac{11\frac{2}{5}}{100} = \frac{11\frac{2}{5} \times 5}{100 \times 5} = \frac{57}{500}$

e. $0.33\frac{3}{4} = \frac{33\frac{3}{4}}{100} = \frac{33\frac{3}{4} \times 4}{100 \times 4} = \frac{135}{400} = \frac{27}{80}$

7-3. a. $0.043\frac{1}{3} = \frac{43\frac{1}{3}}{1,000} = \frac{43\frac{1}{3} \times 3}{1,000 \times 3} = \frac{130}{3,000} = \frac{13}{300}$

b. $0.02\frac{2}{7} = \frac{2\frac{2}{7}}{100} = \frac{2\frac{2}{7} \times 7}{100 \times 7} = \frac{20}{700} = \frac{1}{35}$

c. $0.42\frac{5}{8} = \frac{42\frac{5}{8}}{100} = \frac{42\frac{5}{8} \times 8}{100 \times 8} = \frac{341}{800}$

d. $0.042\frac{1}{4} = \frac{42\frac{1}{4}}{1,000} = \frac{42\frac{1}{4} \times 4}{1,000 \times 4} = \frac{171}{10,000} = \frac{171}{10^4}$

e. $0.05\frac{1}{2} = \frac{5\frac{1}{2}}{100} = \frac{5\frac{1}{2} \times 2}{100 \times 2} = \frac{11}{200}$

8-1. a. $3.85 \div 0.1 = 38.5$

c. $0.0023 \div 0.001 = 2.3$

e. $0.0001 - 0.0001 = 0.0000$

8-2. a. $3.72 \div 0.01 = 372$

c. $32.5 \div 0.1 = 325$

e. $6.0 \div 0.01 = 600$

8-3. a. $1.3 \div 0.01 = 130$

c. $\$1.00 \div 0.01 = \100.00

e. $\$2.00 \div 0.01 = \200.00

b. $6.0 \div 0.01 = 600$

d. $0.471 \div 0.01 = 47.1$

f. $3.4 \div 0.01 = 340$

h. $87 \div 0.01 = 8,700$

i. $22 \div 0.1 = 220$

j. $5.5 \div 0.001 = 5,500$

k. $\$34 \div 0.01 = \$3,400$

l. $\$3.25 \div 0.001 = \$3,250$

m. $\$23.12 \div 0.01 = \$2,312$

Review Assignment 19c

1. a. $12\frac{2}{3} = 12\frac{18}{24}$ b. $18 \div 2\frac{1}{4} = 18 \times \frac{4}{9} = \frac{72}{9} = 8$

c. $\frac{3}{7} = .43$

d. $\$582 - \frac{1}{4} \times \$582 = \$582 - \$145.50 = \$436.50$

e. $216 \div \frac{2}{3} = 216 \times \frac{3}{2} = 216 \times 1.5 = 324$ f. $\frac{4}{5} \text{ min} = 48 \text{ min}$

2. $\$372.00$

$\times .0613$

$\hline 111600$

37200

$\hline 223200$

$\$22,803.600 = \22.81

$\times 62$

$\hline 344$

258

$\hline 2924 \text{ min}$

Section 19.
 Review Assignment 19c.
 Exercises 3-8.

3. Client	Total Wages	With. All.	Income Tax	FICA Tax
a. J. Abars	\$234.75	4	\$19.70	\$14.39
b. B. Knapp	\$212.96	2	\$21.30	\$13.05
c. R. Osaka	\$224.27	1	\$25.70	\$13.75

Edward L. Lake Reconciliation Statement April 30, 1981			
Checkbook balance:	\$689.30	Bank statement balance:	\$824.21
Less:		Less outstanding checks:	
Service charge	2.15	#226	\$32.15
		#227	104.91
			<u>137.06</u>
Correct checkbook balance:	\$687.15	Available bank balance:	\$687.15

24 35	36	4 2 2 10	
\$12,435	\$12,500	\$130,000	The salesperson must
X 11	X 12	-136,785	make \$13,215 to make
\$136,785	\$150,000	\$13,215	an average of \$12,500.

1 2	4 2	1 2	2 2 1
\$22.50	\$19.50	\$15.00	\$1,687.50
X 75	X 50	X 25	975.00
11.250	\$975.00	7500	+ 375.00
15750		3000	\$3,087.50
\$1,687.50		\$375.00	- 1,950.00
			\$1,087.50

\$ 7.25	7. $\frac{3}{8} \times \$512 = \$192.$	\$ 6.50
1050		X 575
375	8. 3.00m	3250
300	2.25m	4550
750	+ 0.50m	3250
750	5.75m	\$37,3750
		= \$37.38

Unit 5.

Sections 19-20.

Review Assignment at 19c - Part 20a - Part 20b.

Exercises 9-10 (for Review Assignment 19c),

Exercise 1 (for Part 20a),

Exercises 2-3 (for Part 20b).

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(continued)

9. a. $\$50 + \frac{1}{2} \text{ of } \$450 = \$50 + \$90 = \$540.$

b. $\$396 - \frac{1}{4} \text{ of } \$396 = \$396 - \$99 = \$297.$

10. Checkbook balance $\$286.00$

Less:

Service charge $\$1.45$

Amount of check not recorded 8.14 9.59

New balance $\$276.41$

Add Deposit of \$100.00 100.00

Current checkbook balance $\$376.41$

Section 19.

19c - 20a

1. $\$5000 = 100\% \times 35\% = \1750

$\$3000 = 100\% \times 25\% = \750

$\$2000 = 100\% \times 15\% = \300

$\$1000 = 100\% \times 3\% = \30

$\$500 = 100\% \times 2\% = \10

$\$1250 = 100\% \times 5\% = \62.50

2. $22\% \text{ of } \$12,500 = \$2,750$ $10\% \text{ of } \$12,500 = \$1,250$

$28\% \text{ of } \$12,500 = \$3,500$ $18\% \text{ of } \$12,500 = \$2,250$

$12\% \text{ of } \$12,500 = \$1,500$ $19\% \text{ of } \$12,500 = \$2,375$

$\$12,750 = \$1,250 + \$2,375 + \$1,250 + \$500 + \$1,250 = \$6,625$

Part 20b: 2-1. $45 \text{ to } 100 = \frac{45}{100} = 45\%$ 2-2. $59 \text{ to } 100 = \frac{59}{100} = 59\%$

2-3. $12 \text{ to } 100 = \frac{12}{100} = 12\%$ 2-4. $6\frac{1}{2} \text{ to } 100 = \frac{6.5}{100} = 6\frac{1}{2}\%$

2-5. $33\frac{1}{3} \text{ to } 100 = \frac{33.3}{100} = 33\frac{1}{3}\%$ 2-6. $100 \text{ to } 100 = \frac{100}{100} = 100\%$

2-7. $125 \text{ to } 100 = \frac{125}{100} = 125\%$ 2-8. $150 \text{ to } 100 = \frac{150}{100} = 150\%$

2-9. $200 \text{ to } 100 = \frac{200}{100} = 200\%$ 2-10. $225 \text{ to } 100 = \frac{225}{100} = 225\%$

2-11. $\frac{1}{2} \text{ to } 100 = \frac{0.5}{100} = \frac{1}{2}\%$ 2-12. $\frac{2}{3} \text{ to } 100 = \frac{0.66}{100} = \frac{2}{3}\%$

Section 20.

Part 20b - Review Assignment 20b.

Exercises 2-4 (for Part 20b),
and Exercise 3 (for Review Assignment 20b).

$$2-13. \frac{3}{4} \text{ to } 100 = \frac{3}{100} = \frac{3}{4}\% \quad 2-14. 0.9 \text{ to } 100 = \frac{0.9}{100} = .9\% \\ 2-15. 0.3 \text{ to } 100 = \frac{0.3}{100} = .3\% \quad 2-16. 0.7 \text{ to } 100 = \frac{0.7}{100} = .7\%$$

$$3-1. \frac{1}{2} = \frac{1 \times 50}{2 \times 50} = \frac{50}{100} = 50\% \quad 3-2. \frac{1}{10} = \frac{1 \times 10}{10 \times 10} = \frac{10}{100} = 10\% \\ 3-3. \frac{5}{10} = \frac{5 \times 10}{10 \times 10} = \frac{50}{100} = 50\% \quad 3-4. \frac{2}{5} = \frac{2 \times 20}{5 \times 20} = \frac{40}{100} = 40\% \\ 3-5. \frac{3}{25} = \frac{3 \times 4}{25 \times 4} = \frac{12}{100} = 12\% \quad 3-6. \frac{7}{50} = \frac{7 \times 2}{50 \times 2} = \frac{14}{100} = 14\% \\ 3-7. \frac{7}{10} = \frac{7 \times 10}{10 \times 10} = \frac{70}{100} = 70\% \quad 3-8. \frac{6}{25} = \frac{6 \times 4}{25 \times 4} = \frac{24}{100} = 24\% \\ 3-9. \frac{13}{50} = \frac{13 \times 2}{50 \times 2} = \frac{26}{100} = 26\% \quad 3-10. \frac{1}{1} = \frac{1 \times 100}{1 \times 100} = \frac{100}{100} = 100\% \\ 3-11. \frac{2}{1} = \frac{2 \times 100}{1 \times 100} = \frac{200}{100} = 200\% \quad 3-12. \frac{4}{1} = \frac{4 \times 100}{1 \times 100} = \frac{400}{100} = 400\%$$

$$4-1. 23\% = \frac{23}{100} = .23 \quad 4-2. 44\% = \frac{44}{100} = .44 \\ 4-3. 10\% = \frac{10}{100} = .10 \quad 4-4. 75\% = \frac{75}{100} = .75 \\ 4-5. 100\% = \frac{100}{100} = 1 \quad 4-6. 230\% = \frac{230}{100} = 2.3 \\ 4-7. 300\% = \frac{300}{100} = 3 \quad 4-8. 350\% = \frac{350}{100} = 3.5 \\ 4-9. 400\% = \frac{400}{100} = 4 \quad 4-10. 37.5\% = \frac{37.5}{100} = .375 \\ 4-11. 4.5\% = \frac{4.5}{100} = .045 \quad 4-12. 9.2\% = \frac{9.2}{100} = .092$$

$$1. a. 12\frac{2}{3} \times 6\frac{1}{2} = \frac{28}{3} \times \frac{13}{2} = \frac{247}{3} = 82\frac{1}{3} \quad d. \frac{5}{7} = .71 \\ b. 7\frac{1}{5} \div 2\frac{1}{4} = \frac{36}{5} \times \frac{4}{9} = \frac{16}{5} = 3\frac{1}{5} \quad e. 0.12 = \frac{12}{100} = \frac{3}{25} \text{ }_{410} \\ c. 28 \text{ is } 25\% \text{ of } 112. \quad f. \begin{array}{r} 1.5 \text{ L} = 1.50 \text{ L} \\ - 250 \text{ mL} = - .25 \text{ L} \\ \hline 1.25 \text{ L} \end{array}$$

$$2. a. \$300 \times 12 = \$3,600 \\ b. \$300 \div 4 = \$75$$

$$3. \$6.052 = \$6.05$$

$$38 \overline{) \$230,000}$$

$$\underline{228}$$

$$200$$

$$\underline{190}$$

$$100$$

$$\underline{76}$$

$$24$$

Unit 5.

Section 20.

Review Assignment 20a - Part 20c.

Exercises 4-6 (for Review Assignment 20b),
and Exercise 5 (for Part 20c).

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Review Assignment 20b (continued)

$$\begin{array}{r}
 4. \quad 7\frac{1}{2} \quad \$6.50 \quad \$6.50 \quad \$9.75 \quad \$247.00 \\
 \quad 8 \quad \times 38 \quad \times 1.5 \quad \times 2 \quad + 19.50 \\
 \quad 6\frac{1}{2} \quad 5200 \quad 3250 \quad \$19.50 \quad \$266.50 \\
 \quad 10 \quad 1950 \quad 650 \\
 + 8 \quad \$247.00 \quad \$9.150 \\
 40
 \end{array}$$

$$\begin{array}{r}
 5. \quad \$266.50 \quad \$16.34 \quad \$266.70 \\
 \quad \times .063 \quad 33.60 \quad - 62.34 \\
 \quad 79950 \quad + 12.40 \quad \$204.16 \\
 \quad 26650 \quad \$62.34 \\
 \quad 159200 \\
 \$16336450
 \end{array}$$

6. Checkbook balance:	\$21.16
Service charge	\$2.15
Amount on check (in error)	5.00
Sub-total	28.31
Add: Deposit not recorded	37.52
Correct checkbook balance:	\$841.80

Part 20c.

5-1. $0.46 = 46\%$	5-2. $0.08 = 8\%$
5-3. $0.21 = 21\%$	5-4. $0.7 = 70\%$
5-5. $0.1 = 10\%$	5-6. $0.5 = 50\%$
5-7. $0.235 = 23.5\%$	5-8. $0.079 = 7.9\%$
5-9. $0.0036 = .36\%$	5-10. $0.12\frac{3}{4} = 12\frac{3}{4}\%$
5-11. $0.37\frac{1}{3} = 37\frac{1}{3}\%$	5-12. $3.41\frac{1}{2} = 341\frac{1}{2}\%$
5-13. $4.56 = 456\%$	5-14. $2.20 = 220\%$
5-15. $1.00 = 100\%$	5-16. $4 = 400\%$
5-17. $1 = 100\%$	5-18. $3 = 300\%$

5-1, $.04\frac{4}{16} = .04\frac{1}{4}$
a. $\frac{1}{16} = 16 \overline{) 1.00}$
 96

 4

$.26\frac{10}{15} = .26\frac{2}{3}$
b. $\frac{4}{15} = 15 \overline{) 4.00}$
 30

 100
 90

 10

$.93$
c. $\frac{15}{16} = 16 \overline{) 15.00}$
 144

 60
 48

 12

$.15\frac{20}{32} = .15\frac{5}{8}$
d. $\frac{5}{32} = 32 \overline{) 5.00}$
 32

 180
 160

 20

$.14\frac{4}{64} = .14\frac{1}{16}$
e. $\frac{9}{64} = 64 \overline{) 9.00}$
 64

 260
 256

 4

6-2. a. $.066\frac{10}{15} = 6.7\%$
a. $\frac{1}{15} = 15 \overline{) 1.000}$
 90

 100
 90

 10

b. $.312\frac{1}{2} = 31.3\%$
 $\frac{5}{16} = 16 \overline{) 5.000}$
 48

 20
 16

 40

c. $.944\frac{8}{18} = 94.4\%$
 $\frac{17}{18} = 18 \overline{) 17.000}$
 162

 80
 72

 80

$.281\frac{8}{32}$
= $32 \overline{) 9.000}$
 64

 260
 256

 40
 32

 8
28.1%

e. $.109\frac{24}{64} = 10.9\%$
 $\frac{7}{64} = 64 \overline{) 7.000}$
 64

 600
 576

 24

Unit 5.

Section 20.

Part 20c - Review Assignment 20c.

Exercises 7-8 (for Part 20c),
and Exercises 1-2 (for Review Assignment 20c).

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- 7-1. 10 is 50% of 20. 7-2. 12 is $33\frac{1}{3}\%$ of 36.
 7-3. \$2 is 25% of \$8. 7-4. \$10 is 40% of \$25.
 7-5. 70% of 10 is 7. 7-6. 20% of 30 is 6.
 7-7. $33\frac{1}{3}\%$ of \$24 is \$8. 7-8. 80% of \$50 is \$40.
 7-9. 20 is $66\frac{2}{3}\%$ of 30. 7-10. 20 is 100% of 20.
 7-11. 20 is 200% of 10. 7-12. 20 is 400% of 5.
 7-13. 20 is 1000% of 2. 7-14. 200% of 6 is 12.
 7-15. 40% of 7 is 2.8. 7-16. \$24 is 100% of \$24.
 7-17. \$31 is 100% of \$31. 7-18. \$27 is 75% of \$36.
 7-19. 50% of \$15 is \$7.50. 7-20. $33\frac{1}{3}\%$ of \$3.33 is \$1.11.

- 8-1. 45 is 25% of 180. 8-2. 24 is 55% of 43.
 8-3. $4\frac{1}{2}\%$ of \$1200 is \$54. 8-4. $6\frac{1}{4}\%$ of \$92 is \$5.79.
 8-5. \$12 is 2% of \$600. 8-6. $12\frac{1}{2}\%$ of \$17 is \$2.12.
 8-7. \$2 is $6\frac{2}{3}\%$ of \$30. 8-8. \$12 is 52% of \$23.
 8-9. 40% of \$15 is \$6. 8-10. $5\frac{1}{3}\%$ is $33\frac{1}{3}\%$ of \$15.
 8-11. 1 is 25% of 4. 8-12. \$1.5 is $33\frac{1}{3}\%$ of \$4.5.
 8-13. 50% of \$10.14 is \$5.07. 8-14. 25% of \$64 is \$16.
 8-15. $8\frac{1}{4}\%$ is 20% of $4\frac{1}{5}\%$. 8-16. $10\frac{1}{2}\%$ is $16\frac{2}{3}\%$ of $66\frac{3}{4}\%$.

Review Assignment 20c.

1. approximate value: (c) a rounded amount.
 budget: (d) a plan for spending.
 complex fraction: (e) denominator is a fraction or mixed number.
 percent: (a) By the hundred.

2. a. $16 \times \frac{3}{4} = \frac{48}{4} = 12$
 b. $16 \div \frac{3}{4} = 16 \times \frac{4}{3} = \frac{64}{3} = 21\frac{1}{3}$
 c. 90 is 40% of 225.
 d. $0.0125 = 1.25\%$
 e. 400 grams = $\frac{4}{10}$ kilograms
 or 40% of a kilogram.

$$\begin{array}{r} 1266\frac{15}{15} = 267\% \\ 15 \overline{) 4000} \\ \underline{30} \\ 100 \\ \underline{90} \\ 10 \end{array}$$

Section 20.

Unit 5.

Review Assignment 20c - Part 20d.

Exercises 3-9 (for Review Assignment 20c),
and Exercise 9 (for Part 20d).

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$$\begin{array}{r} \overset{2}{3} \\ 3. \ \$6.70 \\ \times \ 35 \\ \hline 3350 \\ 2010 \\ \hline \$234.50 \end{array}$$

$$\begin{array}{r} \overset{4}{2} \\ 4. a. \ \$336 \\ \times \ 12 \\ \hline \$4,032 \end{array}$$

$$\begin{array}{r} \overset{1}{2} \\ b. \ \$336 \\ \times \ 4 \\ \hline \$1,344 \end{array}$$

$$\begin{array}{r} a. \ \$5.76 \\ 40) \$230.40 \\ \underline{200} \\ 304 \\ \underline{280} \\ 240 \\ \underline{240} \end{array}$$

$$\begin{array}{r} \overset{3}{3} \\ b. \ \$5.76 \\ \times \ 15 \\ \hline 2880 \\ 576 \\ \hline \$8,640 \\ = \$8.64 \end{array}$$

$$\begin{array}{r} \overset{4}{2} \\ 6. \ \$8.64 \\ \times \ 7 \\ \hline \$60.48 \\ +230.40 \\ \hline \$290.88 \end{array}$$

$$\begin{array}{r} 7. \ \$338 \\ 4) \$1,352 \\ \underline{12} \\ 15 \\ \underline{12} \\ 32 \\ \underline{32} \end{array}$$

$$\begin{array}{l} 8. a. \$0.35 \times 80 = \$28.00 \\ b. \frac{3}{4} \times \$272 = \$204 \end{array}$$

$$\begin{array}{l} 9. a. 126 \text{ is equal to } 108 \text{ increased} \\ \text{by } \frac{1}{6} \text{ of itself.} \\ b. \$7.50 \text{ decreased by } \frac{2}{5} \text{ of} \\ \text{itself gives } \$4.50. \end{array}$$

$$1-1. a. 35\% = .35 \quad b. 79\% = .79 \quad c. 36.5\% = .36\frac{1}{2}$$

$$d. 23.4\% = .23\frac{2}{5} \quad e. 3.4\% = .03\frac{2}{5} \quad f. 4.7\% = .04\frac{7}{10}$$

$$2. a. 6\% = .06 \quad b. 1\% = .01 \quad c. 0.8\% = .00\frac{4}{5}$$

$$d. 0.3\% = .00\frac{3}{10} \quad e. 100\% = 1 \quad f. 150\% = 1.5$$

$$3. a. 345\% = 3.45 \quad b. 200\% = 2 \quad c. 1,000\% = 10$$

$$d. 137\frac{1}{2}\% = 1.37\frac{1}{2} \quad e. 133\frac{1}{3}\% = 1.33\frac{1}{3} \quad f. 29\frac{1}{2}\% = .29\frac{1}{2}$$

$$4. a. 41\frac{2}{3}\% = .41\frac{2}{3} \quad b. 3\frac{1}{4}\% = .03\frac{1}{4} \quad c. 2\frac{2}{3}\% = .02\frac{2}{3}$$

$$d. 6\frac{3}{8}\% = .06\frac{3}{8} \quad e. \frac{1}{3}\% = .00\frac{1}{3} \quad f. \frac{3}{4}\% = .00\frac{3}{4}$$

Unit 5. Section 20.
Part 20a.
Exercises 10-11.

135

10-1. a. 3% of $\$200 = .03 \times \$200 = \$6$

b. 5% of $\$400 = .05 \times \$400 = \$20$

c. 9% of $\$200 = .09 \times \$200 = \$18$

d. 15% of $\$50 = .15 \times \$50 = \$7.50$

e. 4% of $\$12 = .04 \times \$12 = \$7.20$

f. 6% of $\$110 = .06 \times \$110 = \$6.60$

10-2. a. 7% of $\$120 = .07 \times \$120 = \$8.40$

b. 2% of $\$40 = .02 \times \$40 = \$8$

c. 10% of $\$50 = .10 \times \$50 = \$5$

d. 20% of $\$10 = .20 \times \$10 = \$2$

e. 3% of $\$100 = .03 \times \$100 = \$3$

f. 1% of $\$50 = .01 \times \$50 = \$5$

10-3. a. 30% of $\$33 = .30 \times \$33 = \$9.90$

b. 7% of $\$40 = .07 \times \$40 = \$2.80$

c. 20% of $\$50 = .20 \times \$50 = \$10$

d. 20% of $\$30 = .20 \times \$30 = \$6$

e. 3% of $\$20 = .03 \times \$20 = \$66.16$

f. 1% of $\$325 = .01 \times \$325 = \$3.25$

10-4. a. 55% of $\$50 = .55 \times \$50 = \$27.50$

b. 90% of $\$71 = .90 \times \$71 = \$63.90$

c. 1% of $\$726 = .01 \times \$726 = \$7.26$

d. 2% of $\$2,030 = .02 \times \$2,030 = \$40.60$

e. 105% of $\$600 = 1.05 \times \$600 = \$630$

f. 110% of $\$80 = 1.1 \times \$80 = \$88$

11-1. 50% ($\frac{1}{2}$) of $\$56 = \28 ; $\frac{1}{2}$ of $\$46 = \23

11-2. 25% ($\frac{1}{4}$) of $\$28 = \7 ; $\frac{1}{4}$ of $\$72 = \18

11-3. 75% ($\frac{3}{4}$) of $\$36 = \27 ; $\frac{3}{4}$ of $\$40 = \30

11-4. $12\frac{1}{2}\%$ ($\frac{1}{8}$) of $\$24 = \3 ; $\frac{1}{8}$ of $\$64 = \8

11-5. 20% ($\frac{1}{5}$) of $\$20 = \4 ; $\frac{1}{5}$ of $\$45 = \9

11-6. $37\frac{1}{2}\%$ ($\frac{3}{8}$) of $\$48 = \18 ; $\frac{3}{8}$ of $\$96 = \36

- 1-7. $40\% (\frac{2}{5})$ of \$30 = \$12; $\frac{2}{5}$ of \$55 = \$22.
 1-8. $62\frac{1}{2}\% (\frac{5}{8})$ of \$16 = \$10; $\frac{5}{8}$ of \$88 = \$33.
 1-9. $87\frac{1}{2}\% (\frac{7}{8})$ of \$40 = \$35; $\frac{7}{8}$ of \$80 = \$70.
 1-10. $80\% (\frac{4}{5})$ of \$15 = \$12; $\frac{4}{5}$ of \$60 = \$48.
 1-11. $33\frac{1}{3}\% (\frac{1}{3})$ of \$27 = \$9; $\frac{1}{3}$ of \$51 = \$17.
 1-12. $60\% (\frac{3}{5})$ of \$25 = \$15; $\frac{3}{5}$ of \$40 = \$24.
 1-13. $66\frac{2}{3}\% (\frac{2}{3})$ of \$39 = \$26; $\frac{2}{3}$ of \$75 = \$50.
 1-14. $16\frac{2}{3}\% (\frac{1}{6})$ of \$18 = \$3; $\frac{1}{6}$ of \$90 = \$15.
 1-15. $83\frac{1}{3}\% (\frac{5}{6})$ of \$54 = \$45; $\frac{5}{6}$ of \$66 = \$55.
 1-16. $37\frac{1}{2}\% (\frac{3}{8})$ of \$96 = \$36; $\frac{3}{8}$ of \$72 = \$27.
 1-17. $62\frac{1}{2}\% (\frac{5}{8})$ of \$80 = \$50; $\frac{5}{8}$ of \$32 = \$20.
 1-18. $12\frac{1}{2}\% (\frac{1}{8})$ of \$32 = \$4; $\frac{1}{8}$ of \$56 = \$7.
 1-19. $25\% (\frac{1}{4})$ of \$44 = \$11; $\frac{1}{4}$ of \$64 = \$16.
 1-20. $40\% (\frac{2}{5})$ of \$35 = \$14; $\frac{2}{5}$ of \$40 = \$16.
 1-21. $75\% (\frac{3}{4})$ of \$28 = \$21; $\frac{3}{4}$ of \$52 = \$39.
 1-22. $20\% (\frac{1}{5})$ of \$15 = \$3; $\frac{1}{5}$ of \$60 = \$12.

- 2-1. a. 45% of \$1,600 = $.45 \times \$1,600 = \720
 b. 80% of \$5,800 = $.80 \times \$5,800 = \$4,640$
 c. 30% of \$2,900 = $.30 \times \$2,900 = \870
 d. 3% of \$1,467 = $.03 \times \$1,467 = \44.01
 e. 6% of \$1,840 = $.06 \times \$1,840 = \110.40
 f. $16\frac{2}{3}\%$ of \$540 = $.16\frac{2}{3} \times \$540 = \90
 g. 20% of \$305.40 = $.20 \times \$305.40 = \61.08
 h. 25% of \$628 = $.25 \times \$628 = \157
 i. $33\frac{1}{3}\%$ of \$822 = $.33\frac{1}{3} \times \$822 = \274
 2-2. a. 37.6% of \$400 = $.376 \times \$400 = \150.40
 b. $4\frac{1}{2}\%$ of \$1,600 = $.045 \times \$1,600 = \72
 c. $5\frac{1}{2}\%$ of \$1,200 = $.055 \times \$1,200 = \66
 d. 125% of \$88 = $1.25 \times \$88 = \110
 e. $166\frac{2}{3}\%$ of \$36.75 = $1.66\frac{2}{3} \times \$36.75 = \61.25
 f. $62\frac{1}{2}\%$ of \$1,272 = $.625 \times \$1,272 = \795

Unit 5.

Section 20.

Part 20d - Review Assignment 20d.

Exercises 12-15 (for Part 20d),

and Exercise 1 (for Review Assignment 20d).

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Exercises 12-15

g. 106% of $\$805 = 1.06 \times \$805 = \$853.40$

h. $187\frac{1}{2}\%$ of $\$16.40 = 1.875 \times \$16.40 = \$30.75$

i. $83\frac{1}{3}\%$ of $\$4,020 = .83\frac{1}{3} \times \$4,020 = \$3,350$

13-1. a. $3\% = \frac{3}{100}$

c. $31\% = \frac{31}{100}$

13-2. a. $6\% = \frac{6}{100} = \frac{3}{50}$

c. $4\% = \frac{4}{100} = \frac{1}{25}$

13-3. a. $4\frac{1}{2}\% = \frac{4.5}{100} = \frac{9}{200}$

c. $15\% = \frac{15}{100} = \frac{3}{20}$

13-4. a. $90\% = \frac{90}{100} = \frac{9}{10}$

c. $40\% = \frac{40}{100} = \frac{2}{5}$

13-5. a. $60\% = \frac{60}{100} = \frac{3}{5}$

c. $75\% = \frac{75}{100} = \frac{3}{4}$

13-6. a. $125\% = \frac{125}{100} = 1\frac{1}{4}$

c. $175\% = \frac{175}{100} = 1\frac{3}{4}$

b. $17\% = \frac{17}{100}$

d. $2\% = \frac{2}{100} = \frac{1}{50}$

b. $14\% = \frac{14}{100} = \frac{7}{50}$

d. $12\% = \frac{12}{100} = \frac{3}{25}$

b. $5\% = \frac{5}{100} = \frac{1}{20}$

d. $45\% = \frac{45}{100} = \frac{9}{20}$

b. $70\% = \frac{70}{100} = \frac{7}{10}$

d. $20\% = \frac{20}{100} = \frac{1}{5}$

b. $25\% = \frac{25}{100} = \frac{1}{4}$

d. $50\% = \frac{50}{100} = \frac{1}{2}$

b. $150\% = \frac{150}{100} = 1\frac{1}{2}$

d. $250\% = \frac{250}{100} = 2\frac{1}{2}$

14-1. a. $0.3\% = \frac{0.3}{1,000}$

14-2. a. $1.3\% = \frac{1.3}{1,000}$

14-3. a. $0.5\% = \frac{0.5}{1,000} = \frac{1}{2,000}$

14-4. a. $1.5\% = \frac{1.5}{1,000} = \frac{3}{200}$

b. $0.7\% = \frac{0.7}{1,000}$

b. $0.2\% = \frac{0.2}{1,000} = \frac{1}{5,000}$

c. $0.5\% = \frac{0.5}{1,000} = \frac{1}{2,000}$

b. $2.5\% = \frac{2.5}{1,000} = \frac{1}{40}$

15-1. $1\frac{1}{4}\% = 1.25\% = \frac{1.25}{100} = \frac{1}{80}$

15-3. $17\frac{1}{2}\% = 17.5\% = \frac{17.5}{100} = \frac{7}{40}$

15-5. $30\frac{2}{3}\% = 30.66\% = \frac{30.66}{100} = \frac{1533}{5000}$

15-7. $9\frac{1}{6}\% = 9.17\% = \frac{9.17}{100} = \frac{917}{10,000}$

15-9. $26.4\% = \frac{26.4}{100} = \frac{33}{125}$

15-2. $1\frac{1}{2}\% = 1.5\% = \frac{1.5}{100} = \frac{3}{200}$

15-4. $26\frac{2}{3}\% = 26.67\% = \frac{26.67}{100} = \frac{4}{15}$

15-6. $3\frac{1}{8}\% = 3.125\% = \frac{3.125}{100} = \frac{1}{32}$

15-8. $17.5\% = \frac{17.5}{100} = \frac{7}{40}$

15-10. $5.8\% = \frac{5.8}{100} = \frac{29}{500}$

Review Assignment

1. a. 32% of $\$85$ is $\$34.00$.

b. $\frac{5}{9} = .56$

c. $0.16 = \frac{16}{100} = \frac{4}{25}$

d. $0.0235 = 2.35\%$

Section 20.

Review Assignment 20d.
Exercises 1-6.

Unit 5.

135

e. $\frac{7}{13} = \frac{5384}{10000} = 53.8\%$

$\frac{7}{13} = 13 \overline{) 7.0000}$

65

50

39

110

104

60

52

8

2. \$556

$\times 37.5$

$\hline 2780$

3892

1668

\$208.500

= \$208.50

f. 3 665 kg

= 3.665 metric tons.

3. a. \$2157

38) \$266

21266

798

108

b. \$7.00

$\times 1.5$

3500

700

\$10.500

= \$10.50

c. \$10.50

$\times 5$

\$52.50

+266.00

\$318.50

4. Fisher's share: \$8,550 ($9 \times \$950 = \$8,550$)

Lance's share: \$6,650 ($7 \times \$950 = \$6,650$)

($\$8,550 + \$6,650 = \$15,200$)

5. \$58,015

\$98,805

\$53,225

+40,490

-71,335

-27,170

\$98,505

\$27,170

\$26,055

6. a. $0.085 \times 4,200 = \$357.00$

b. $\frac{2}{3} \times \$445 = \$330.$

Unit 5,

Section 20.

Interviews

E. J. Reed	
Reconciliation Statement	
May 31, 1961	
Checking account	\$720.08
Less	
#230	\$17.00
#231	10.00
#232	14.00
Correct checking balance	\$718.43
Bank statement balance	\$718.43
Less outstanding checks:	
#230	\$17.00
#231	10.00
#232	14.00
Correct checking balance	\$718.43

2. \$ 32.50 \$ 460.³₁₄
+ 432.13 - 460.¹₁₆
\$ 464.63 \$ 28
- 4.19 Short;
\$ 460.44 by 284.

3. 85%
85%
75%
90%
+ 80%
415%

83%
5) 415%
40
15
15

4. $\begin{array}{r} 12 \\ \$204 \\ 357 \times 5 \\ 309 \\ + 336 \\ \hline \$1296 \end{array}$

Section 20.
General Review.
Exercises 5-8.

5. $\$6,552 = 48.533334\%$ of $\$13,500$ $\overset{21}{48.5\%}$
 $\$774 = 5.733334\%$ of $\$13,500$ 5.7%
 $\$2,067 = 15.311111\%$ of $\$13,500$ 15.3%
 $\$2,352 = 17.422222\%$ of $\$13,500$ $+ 17.4\%$
 $\underline{\hspace{1cm}} 86.9\%$

$100\% - 86.9\% = 13.1\%$

6. $\overset{11}{\$8,10} \overset{3}{\$8,10} \overset{11}{\$12,15} \overset{2}{\$324.00} \overset{3}{\$409.05}$
 $\times \overset{40}{40} \times \overset{1.5}{1.5} \times \overset{7}{7} + \overset{85.05}{85.05} \times \overset{.0613}{.0613}$
 $\$324.00 \quad 4050 \quad \$85.05 \quad \$409.05 \quad 122715$
 $\overset{1}{\$25.07} \quad \overset{810}{\$12.150} \quad \overset{310815}{\$409.05} \quad 40905$
 $+ \overset{65.20}{65.20} \quad \quad \quad - \overset{90.27}{90.27} \quad \underline{245430}$
 $\$90.27 \quad \quad \quad \$318.78 \quad \$25074765$

7. $\overset{1}{\$217.10}$ (Income tax) $\overset{215}{\$238.80}$
 $+ \overset{13.71}{13.71}$ (FICA tax) $- \overset{30.81}{30.81}$
 $\$30.81$ (5 with. all.) $\$202.79$

8. $\overset{11}{\$30.00} \overset{50}{\$50.00} \overset{40}{\$40.00} \overset{30}{\$30.00} \overset{11}{\$1,250.00}$
 $\times \overset{48}{48} \times \overset{25}{25} \times \overset{20}{20} \times \overset{3}{3} \quad 800.00$
 $\underline{24000} \quad \underline{25000} \quad \$800.00 \quad \$90.00 \quad + \quad 90.00$
 $\underline{12000} \quad \underline{10000} \quad \quad \quad \underline{\hspace{1cm}} \$2,140.00$
 $\$1,440.00 \quad \$1,250.00 \quad \underline{\hspace{1cm}} \$14.573 = \$14.57 \quad - \quad 1,440.00$
 $\quad \quad \quad 48) \$700.00 \quad \underline{\hspace{1cm}} \700.00
 $\quad \quad \quad \underline{48}$
 $\quad \quad \quad 220$
 $\quad \quad \quad \underline{192}$
 $\quad \quad \quad 280$
 $\quad \quad \quad \underline{240}$
 $\quad \quad \quad 400$
 $\quad \quad \quad \underline{384}$
 $\quad \quad \quad \underline{160}$
 $\quad \quad \quad \underline{160}$

Unit 5.

Section 20.
General Review.
Exercises 9-11.

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F. 2000

9	400	\$.85	750	\$ 1.55
X	\$.85	X 2.5	X \$ 1.55	X 1.25
	2000	425	3750	775
	3200	= 170	3750	310
	\$ 340.00	\$ 2.125	155	155
		= \$.002	\$ 567.50	\$ 19.375 = \$.001

El Crispo crackers are cheaper by \$.001.

10	50	\$ 4.25	\$ 4.25	\$ 3.350.00
X	\$ 27	X 1.50	X 1.50	+ 2.250.00
	1050		1050	\$ 5.600.00
	300			- 5.600.00
	\$ 4.00	\$ 4.00	\$ 4.00	\$ 8.000.00
			\$ 5.125.00	

\$ 29.146 = \$ 29.15
22 \$ 816.10

11.

Random Wall
Reconciliation Statement
May 1, 1981

Cashbook balance: \$557.63	Bank statement balance: \$462.50
Less:	Less outstanding checks:
Service charge: 2.00	#21 \$ 118.28
	#22 60.34 178.62
	Sub. total: \$ 283.88
	Adding deposit in transit: 268.75
Cashbook balance: \$552.63	Bank statement balance: \$552.63

Section 21.

Unit 6.

Part 21a. ~~Answer the questions~~

Exercises 1-2 for Part 21a.

Unit 6, Section 21.

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	Quantity	Commission on Each	Amount of Commission
1-1.	60 cameras	\$ 3.00	\$180.00
1-2.	180 pens	\$.40	\$ 72.00
1-3.	75 lamps	\$ 2.00	\$150.00

	Sales	Rate of Commission	Amount of Commission
1-4.	\$2,500	6%	\$150
1-5.	\$6,000	4%	\$240
1-6.	\$3,200	12½%	\$400

2-1. Salary = \$160	2-2. Salary = \$176.00
Commission = 90	Commission = 74.50
Total earnings = \$250	Total earnings = \$250.50
(\$2,250 × 4% = \$90)	(\$3,725 × 2% = \$74.50)

2-3. Salary = \$170.00 \$2,980.00
 Commission = 24.80 - 500.00
 Total earnings = \$194.80 \$2,480.00
 (1% of \$2,480 = \$24.80)

2-4. Salary = \$800.00 \$9,425
 Commission = 192.50 - 7,500
 Total earnings = \$992.50 \$1,925
 (10% of \$1,925 = \$192.50)

1-5. Salary = \$225.00 \$2,800
 Commission = 7.50 - 1,300
 Total earnings = \$232.50 \$1,500
 (½% of \$1,500 = \$7.50)

Unit 6.

Section 21.

Part 21a - Review Assignment 21a.

Exercises 2 (for Part 21a),

and Exercises 1-6 (for Review Assignment 21a).

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Exercises 2 (for Part 21a)

$$\begin{array}{r}
 \text{6. Salary} = \$700.00 \\
 \text{Commission} = \underline{157.30} \\
 \text{Total} = \$857.30 \\
 (\$857.30 \times 6\frac{1}{2}\% = \$157.30) \\
 \hline
 \$2,420
 \end{array}$$

Review Assignment 21a

$$1. a. 0.18 = \frac{18}{100} = \frac{9}{50}$$

$$b. 45\% = \frac{45}{100}$$

$$c. 13\% = \frac{13}{100}$$

$$d. \$96 \div \frac{3}{4} \text{ of } \$96 = \$96 + \$72 = \$168$$

$$e. \$377 - \frac{1}{5} \text{ of } \$377 = \$377 - \$75.4 = \$301.6$$

f. \$191 is $\frac{1}{5}$ greater than \$165.

$$2. \$295.50 \times 20\% = \$59.10$$

$$\times 64$$

$$11700$$

$$17550$$

$$\$1,872.00$$

$$3. \text{Salary} = \$165.00$$

$$\text{Commission} = \underline{61.50}$$

$$\text{Total earnings} = \$226.50$$

$$(\$226.50 \times 22\% = \$50.83)$$

$$4. \text{Salary} = \$175.00 \quad \$2,874$$

$$\text{Commission} = \underline{43.70} \quad -2,000$$

$$\text{Earnings} = \$218.70 \quad \$ 874$$

$$(\$218.70 \times 20\% = \$43.74)$$

$$5. \$12,500$$

$$\times 0.613$$

$$37500$$

$$12500$$

$$75000$$

$$\$7,662,500$$

$$= \$7.66$$

$$6. \$260$$

$$4) \$1,040$$

$$8$$

$$240$$

$$240$$

Section 21.

Unit 6,

Review Assignment 21a - Part 21b.
Exercises 7-9 (for Review Assignment 21a),
and Exercises 3-4 (for Part 21b),

141

7. $\$210 \times 4 = \840 ,

8. $\$52 = \0.65×80 .

9. a. $\$255$ is $\frac{2}{5}$ of $\$425$.

b. $\$528$ equals $\$384$ increased by $\frac{3}{8}$ of itself.

c. $\$33$ equals $\$49.50$ decreased by $\frac{1}{3}$ of itself.

3-1. a. 1% of $60 = 0.01 \times 60 = .60$

b. 1% of $\$85 = 0.01 \times \$85 = \$.85$

c. 1% of $\$243 = 0.01 \times \$243 = \$2.43$

d. 10% of $94 = 0.1 \times 94 = 9.4$

e. 10% of $\$33 = 0.1 \times \$33 = \$3.30$

f. 10% of $\$9 = 0.1 \times \$9 = \$.90$

3-2. a. 100% of $28 = 1 \times 28 = 28$

b. 100% of $\$6.70 = 1 \times \$6.70 = \$6.70$

c. 100% of $\$259 = 1 \times \$259 = \$259$

d. $1,000\%$ of $43 = 10 \times 43 = 430$

e. $1,000\%$ of $\$15 = 10 \times \$15 = \$150$

f. $1,000\%$ of $\$7.50 = 10 \times \$7.50 = \$75.00$

3-3. a. 10% of $\$242 = 0.1 \times \$242 = \$24.20$

b. 10% of $\$3.84 = 0.1 \times \$3.84 = \$.38$

c. 10% of $\$27.25 = 0.1 \times \$27.25 = \$2.73$

d. 10% of $\$1,745 = 0.1 \times \$1,745 = \$174.50$

e. 1% of $\$64.45 = 0.01 \times \$64.45 = \$.64$

f. 1% of $\$7.48 = 0.01 \times \$7.48 = \$.07$

4-1. $\frac{1}{4}\%$ of $\$1,600 = \4.00 4-2 $\frac{1}{2}\%$ of $\$600 = \3.00

$\frac{1}{4}\%$ of $\$400 = \1.00

$\frac{1}{2}\%$ of $\$240 = \1.20

$\frac{1}{4}\%$ of $\$3,600 = \9.00

$\frac{1}{2}\%$ of $\$860 = \4.30

$\frac{1}{4}\%$ of $\$2,800 = \7.00

$\frac{1}{2}\%$ of $\$66.40 = \$.33$

$\frac{1}{4}\%$ of $\$820 = \2.05

$\frac{1}{2}\%$ of $\$42.40 = \$.21$

Unit 6

Section 21.

Part 21b.

Exercises 4-6.

142

Exercises 4
(continued).

4-3. $\frac{1}{8}$ of \$3,200 = \$400

$\frac{1}{8}$ of \$5,600 = \$700

$\frac{1}{8}$ of \$8,800 = \$1100

$\frac{1}{8}$ of \$480 = \$60

$\frac{1}{8}$ of \$800 = \$100

4-4. $\frac{1}{10}\%$ of \$3,000 = \$3.00

$\frac{1}{10}\%$ of \$500 = \$.50

$\frac{1}{10}\%$ of \$1,000 = \$1.00

$\frac{1}{10}\%$ of \$200 = \$.20

$\frac{1}{10}\%$ of \$166 = \$.17

5-1. a. 25% of \$3,200 = .25 \times \$3,200 = \$800

b. $\frac{1}{4}$ of \$3,200 = .25 \times \$3,200 = \$800

c. $\frac{1}{4}\%$ of \$3,200 = .0025 \times \$3,200 = \$8.00

d. 50% of \$2,400 = .5 \times \$2,400 = \$1,200

e. $\frac{1}{2}$ of \$2,400 = .5 \times \$2,400 = \$1,200

f. $\frac{1}{2}\%$ of \$2,400 = .005 \times \$2,400 = \$12.00

5-2. a. $\frac{1}{3}\%$ of \$900 = .0033 \times \$900 = \$3.00

b. $\frac{1}{3}\%$ of \$750 = .0033 \times \$750 = \$2.50

c. $\frac{1}{5}\%$ of \$500 = .002 \times \$500 = \$1.00

d. $\frac{3}{4}\%$ of \$400 = .0075 \times \$400 = \$3.00

e. $\frac{2}{3}\%$ of \$900 = .0067 \times \$900 = \$6.03

f. $\frac{3}{5}\%$ of \$400 = .006 \times \$400 = \$2.40

5-3. a. $\frac{3}{8}\%$ of \$72 = .00375 \times \$72 = \$.27

b. $\frac{1}{2}\%$ of \$32 = .005 \times \$32 = \$.16

c. $\frac{2}{5}\%$ of \$30 = .004 \times \$30 = \$.12

d. $\frac{3}{4}\%$ of \$48 = .0075 \times \$48 = \$.36

e. $\frac{2}{3}\%$ of \$45 = .0067 \times \$45 = \$.30

f. $\frac{5}{8}\%$ of \$64 = .00625 \times \$64 = \$.40

6-1. a. $\frac{1}{4}\%$ = .0025

b. $\frac{1}{2}\%$ = .005

6-2. a. $\frac{1}{2}$ of 1% = .005

b. $\frac{1}{5}$ of 1% = .002

6-3. a. $\frac{3}{4}\%$ = .0075

b. $\frac{1}{8}\%$ = .0125

6-4. a. $\frac{3}{8}$ of 1% = .00375

b. $\frac{2}{5}$ of 1% = .004

6-5. a. $\frac{1}{3}\%$ = .0033 $\frac{1}{3}$

b. $\frac{5}{6}\%$ = .0083 $\frac{1}{3}$

6-6. a. $\frac{1}{10}\%$ = .001

b. $\frac{2}{3}\%$ = .0066 $\frac{2}{3}$

Section 21.

Unit 6.

Part 21 b - Review Assignment 21 b.

Exercise 7 (for Part 21 b),

and Exercises 1-5 (for Review Assignment 21 b).

143

7-1. a. $0.0075 = \frac{3}{4}\%$

b. $0.0625 = \frac{5}{8}\%$

c. $0.0025 = \frac{1}{4}\%$

7-3. a. $0.00\frac{1}{3} = \frac{1}{300}\%$

b. $0.00125 = \frac{1}{800}\%$

c. $0.004 = \frac{1}{250}\%$

7-5. a. $0.0875 = 7\frac{3}{4}\%$

c. $0.0066\frac{2}{3} = \frac{1}{150}\%$

7-2. a. $0.085 = \frac{17}{20}\%$

b. $0.005 = \frac{1}{2}\%$

c. $0.002 = \frac{1}{5}\%$

7-4. a. $0.00375 = \frac{3}{800}\%$

b. $0.0033\frac{1}{3} = \frac{1}{300}\%$

c. $0.00\frac{2}{3} = \frac{1}{150}\%$

b. $0.00875 = \frac{7}{800}\%$

1. a. $\frac{1}{3}\%$ of \$855 is \$2.85.

b. \$75 is 30% of \$250.

c. $85\% = .85$ d. $27\% = \frac{27}{100}$

e. $\$54 = \0.72×75

2. Salary: \$850.00

Commission: 385.26

Total earnings: \$1,235.26

($\frac{1}{2}\%$ of \$25,684 = \$385.26)

3. Salary: \$188.00

Commission: 27.00

Total earnings: \$215.00

(3% of \$900 = \$27.00)

\$4,100

- 3,200

\$ 900

4. \$ 264.75

52) \$13,767.00

104

336

312

247

208

390

364

260

260

5. \$ 247.50

4

\$ 990.00

Unit 6,

Section 21.

Review Assignment 21.6.

Exercises 6-10.

144

Review - Assignment 21.6

$$\begin{array}{r}
 6. \quad \begin{array}{r} \overset{1}{9} \\ \overset{2}{8} \times \overset{1}{38} \\ \hline 6\frac{1}{2} \\ \overset{1}{9} \\ \hline 42 \end{array} \quad \begin{array}{r} \overset{2}{\$6.72} \\ \overset{1}{\times 38} \\ \hline 336 \\ \overset{1}{5376} \\ \hline 2016 \end{array} \quad \begin{array}{r} \overset{2}{\$6.72} \\ \overset{1}{\times 1.5} \\ \hline 3360 \\ \overset{1}{672} \\ \hline 10.080 \end{array} \quad \begin{array}{r} \$258.72 \\ \pm 10.08 \\ \hline \$268.80 \end{array}
 \end{array}$$

$$\begin{array}{r}
 7. \quad \begin{array}{r} \overset{32}{158} \\ \overset{175}{-} \\ \hline 189 \\ \overset{192}{-} \\ \hline 879 \end{array} \quad \begin{array}{r} \overset{879}{-} \overset{40}{40} \\ \hline 839 \end{array} \quad \begin{array}{r} \overset{13}{839} \\ \overset{1}{\times 40} \\ \hline 33560 \end{array} \quad \begin{array}{r} \overset{1}{8.2} \overset{1}{2.6} \text{ kg} \\ \overset{1}{1.5} \text{ kg} \\ \hline 4.2 \text{ kg} \\ \overset{3.0}{-} \\ \hline 14.5 \text{ kg} \end{array} \quad \begin{array}{r} \overset{1}{\$1.25} \\ \overset{1}{\times 14.5} \\ \hline 625 \\ \overset{500}{-} \\ \hline 125 \\ \hline \$18.125 \\ = \$18.13 \end{array}
 \end{array}$$

9. a. $\$324$ is $\frac{3}{4}$ of $\$432$.

b. $\frac{1}{4}$ of $170 = 42.5$

c. $\$30$ equals $\$37.50$ decreased by $\frac{1}{5}$ of itself.

10. Checkbook balance:	\$ 842.11
Less:	
Amount on check stub (too small)	\$ 5.00
Service charge	2.15
Sub-total	\$ 834.96
Add: Amount on check stub (too long)	\$ 3.00
Deposit not recorded	37.91
Correct checkbook balance:	\$ 788.05

Section 22.

Unit 6.

Parts 22a-22b.

Exercises 1/3 (for Part 22a),
and Exercise 2 (for Part 22b).

Section 22.

145

1-1.	Total Sales	Commission	Total Commission
a.	\$8,000	4% on first \$6,000; 5% on excess over \$6,000	\$340
b.	700	10% on first \$400; 15% on excess over \$400	85
c.	800	8% on first \$850; 12% on excess over \$850	64
d.	9,450	6% on first \$6,500; 7% on next \$6,500	596.50
e.	6,920	10% on all sales, plus 5% on excess over \$6,000	738
f.	8,050	15% on all sales, and 7% on sales over \$8,000	1,767.50

Arithmetic Check:

- a. (4% of \$6,000 = \$240; 5% of \$2,000 = \$100; \$240 + \$100 = \$340)
 b. (10% of \$400 = \$40; 15% of \$300 = \$45; \$40 + \$45 = \$85)
 c. (8% of \$800 = \$64)
 d. (6% of \$6,500 = \$390; 7% of \$2,950 = \$206.50; \$390 + \$206.50 = \$596.50)
 e. (10% of \$6,920 = \$692; 5% of \$920 = \$46; \$692 + \$46 = \$738)
 f. (15% of \$8,050 = \$1,207.50; 7% of \$8,000 = \$560; \$1,207.50 + \$560 = \$1,767.50)

2. $\$14,500 \times 6\% = \870 , commission on first \$15,000
 $15,000 \times 6\% = 900$, commission on first \$15,000
 $(\$18,200 - \$15,000 = \$3,200)$
 $3,200 \times 8\% = 256$, commission on sales over \$15,000
 $\$2,026$, total commission

3. 50 units = \$.50, commission on first 50 units
 100 units = .75, Commission on next 100 units
 75 units = 1.00, commission on additional units
 225 units = \$ 2.25, total commission

- 2-1. \$5 is 25% greater than \$4.
 2-2. \$6 is 20% greater than \$5.
 2-3. 30% more than \$10 is \$13.
 2-4. \$4 is 20% smaller than \$5.

Unit 6.

Section 22.

Part 22b - Review Assignment 22b.

Exercise 2 (for Part 22b),

a. d. e. f. 1 (for Review Assignment + 22b).

146

Exercise 2
(continued)

2-5. \$3 is 25% smaller than \$4.

2-6. 30% less than \$10 is \$7.

2-7. \$8 is $33\frac{1}{3}\%$ more than \$6.

2-8. \$8 is 20% less than \$10.

2-9. 25% more than \$16 is \$20.

2-10. \$35 is $16\frac{2}{3}\%$ more than \$30.

2-11. 20% less than \$25 is \$20.

2-12. 25% more than \$24 is \$30.

2-13. \$24 is 25% less than \$32.

2-14. \$44 is 10% more than \$40.

2-15. \$7 is 30% less than \$10.

2-16. \$7 is 70% of \$10.

2-17. \$6 is 25% less than \$8.

2-18. \$3 is 75% of \$4.

2-19. \$5 is 25% more than \$4.

2-20. \$5 is 125% more than \$4.

2-21. \$5 is 20% more than \$4.

2-22. \$6 is 120% of \$5.

2-23. \$10 is 200% of \$5.

2-24. \$15 is 300% of \$5.

2-25. \$15 is 200% more than \$5.

2-26. 150% more than \$10 is \$25.

2-27. 250% of \$2 is \$5.

2-28. \$12 is 100% more than \$6.

Review Assignment 22b

1. graduated commission: (d) Rate increases as sales increase.

quota: (a) Fixed pay for the week, month, or year.
salary: (c) A fixed amount above which commission is paid.

straight commission: (b) Commission is the only pay.

Section 22.

Review Assignment 22b.

Exercises 2-7.

Unit 6.

147

2. a. \$56 is 35% of \$160.

b. $\frac{3}{7} = .429$

c. $\frac{9}{14} = 64.3\%$

d. $19\% = \frac{19}{100}$

e. \$96 increased by 25% of itself gives \$120.

f. \$450 decreased by 40% of itself gives \$270.

g. 160 km is 25% more than 120 km.

3. \$13,500 \times 10% = \$1,350, commission on all sales

(\$13,500 - \$8,000 = \$5,500)

5,500 \times 4% = 220, commission on sales over \$8,000

\$1,570, total commission

4. \$2,750 - \$2,400 = \$350

$1\frac{1}{2}\%$ of \$2,400 = \$360

\$2,750 + \$360 = \$3,110

5. \$270 \$1,131 a. Pitts.

$\times 4 = 1,080$

\$1,080 \$51

\$282.75

4) \$1,131.00

b. \$282.75 - \$270.00 = \$12.75.

c. \$51.00.

6. $\begin{array}{r} 87 \\ \times 5 \\ \hline 435 \\ 88 \\ \times 8 \\ \hline 704 \\ 64 \\ \hline 88 \\ 92 \\ \hline + 89 \\ \hline 704 \end{array}$

7. 2 lb. 14 oz. = 46 oz.

\$.03 $\frac{1}{2}$

46) \$1.61

2 lb. 8 oz. = 40 oz.

\$.03 $\frac{1}{8}$

40) \$1.25

a. Martha Miller.

b. $\frac{3}{8}$ ¢.

Unit 6.

Section 22.

Part 22c - Review Assignment 22c.

Exercises 3-4 (for Part 22c),

and Exercise 1 (for Review Assignment 22c).

148

3-1. 10% more than \$300 = $\$30 + \$300 = \$330$.

3-2. 10% greater than \$400 = $\$40 + \$400 = \$440$.

3-3. 10% as much as \$400 = $\$40$.

3-4. 10% less than \$300 = $\$300 - \$30 = \$270$.

3-5. 10% smaller than \$200 = $\$200 - \$20 = \$180$.

3-6. 1% larger than \$200 = $\$200 + \$2 = \$202$.

3-7. \$500 decreased by 20% = $\$500 - \$100 = \$400$.

3-8. \$40 increased by 10% = $\$40 + \$4 = \$44$.

3-9. \$60 reduced by $33\frac{1}{3}\%$ = $\$60 - \$20 = \$40$.

3-10. 30% larger than \$40 = $\$12 + \$40 = \$52$.

3-11. 25% less than \$24 = $\$24 - \$6 = \$18$.

3-12. 2% more than \$500 = $\$10 + \$500 = \$510$.

3-13. 20% less than \$60 = $\$60 - \$12 = \$48$.

3-14. 200% more than \$20 = $\$40 + \$20 = \$60$.

3-15. 100% more than \$5 = $\$5 + \$5 = \$10$.

3-16. \$4 increased by 200% = $\$4 + \$8 = \$12$.

4-1. $\$598 - \$520 = \$78$; 15% increase

4-2. $\$76.00 - \$60.00 = \$16.00$; 20% decrease

4-3. $\$7.15 - \$5.50 = \$1.65$; 30% increase

4-4. $\$15.75 - \$13.86 = \$1.89$; 12% decrease

4-5. $\$9,250 - \$8,510 = \$740$; 8% decrease

Review Assignment 22c:

a. $\$18 + 35\% = \$18.00 + \$6.30 = \24.30

b. $\$3.50 - 16\% = \$3.50 - \$0.56 = \2.94

c. $\$20.00 + 18\% (\$3.60) = \$23.60$

d. $\$200.00 - 15\% (\$30.00) = \$170.00$

e. $6\% = \frac{6}{100} = \frac{3}{50}$

f. $250 \text{ mm} = 2 \text{ m}$

$150 \text{ cm} = 1.5 \text{ m}$

$+12.5 \text{ m} = +12.5 \text{ m}$

14.2 m

Section 22.

Review Assignment 22c.

Exercises 2-9.

Unit 6.

149

2. $\$2,610 - \$2,250 = \$360$; 16% increase

3. Salary: $\$180.00$
 Commission: $\underline{97.20}$
 Total sales: $\$277.20$
 (2% of $\$4,860 = \97.20)

4. 5% of $\$7,200 = \360 , commission on all sales
 4% of $5,000 = \underline{200}$, commission on sales over $\$5,000$
 $\$560$, total commission
 $\$7,200 + \$560 = \$7,760$

5. $\$316.875 = \316.88 $\$315 \times 4 = \$1,260$

4) $\$1,267.500 - 315.00$

12

6

4

27

24

35

32

30

28

20

20

a. Hart's; $\$7.50$.

b. $\$1.88$.

6. $95\% \times 2.4 = \$2.28$.

7. $210m - 150m = 60m$;
 $60m = 40\%$ greater

8. $\frac{3}{4}\% = .0075$

9. $\$149.95$

$\times 15$

$\$749.75$

14995

$\$2,249.25$

$\$130.00$

$\times 25$

650.00

26000

$\$3,250.00$

$\$3,280.00$

$\underline{-2,249.25}$

$\$1,000.75$ increase

Unit 6.

Section 23.

Part 23a:

Exercises 1-2.

150

Section 23.

1-1.	Sales	Commission	Rate	1-2. Sales:	\$12.00
				Commission:	1.80
				Rate:	15%
a.	\$3300	\$224	7%		
b.	\$1250	\$37.50	3%		
c.	\$120	\$18	15%	1-3. a.	\$1,100
d.	\$1400	\$175	12½%		700
e.	\$2,400	\$132	5½%		\$400 (rate of Commission)
f.	\$1800	\$63	3½%		12 = 2%
					\$400

$$1-4. \quad \$9,000 - \$5,000 = \$4,000$$

$$\$160 \div \$4,000 = 4\%$$

$$2. \quad \$945 \div 7\% = \$13,500$$

$$- \$945 \div .07 = \$13,500$$

$$2-2. \quad \$824 \div 4\% = \$20,600$$

$$= \$824 \div .04 = \$20,600$$

$$2-3. \quad \$1,150 - \$700 = \$450$$

$$\$450 \div .03 = \$15,000$$

$$2-4. \quad \$200 - \$160 = \$40$$

$$\$40 \div .05 = \$800$$

$$2-5. \quad \$180 \div .06 = \$3,000$$

$$\$360 - \$180 = \$180$$

$$\$3,000 + \$1,200 = \$4,200$$

Section 23.
Review Assignment 23a.
Exercises 1-7.

Unit 6.

151

1. a. $2.416 = 2.42$

$$\begin{array}{r}
 24,000 \overline{) 58,000.000} \\
 \underline{48,000} \\
 10,000 \\
 \underline{9,600} \\
 40,000 \\
 \underline{24,000} \\
 16,000 \\
 \underline{14,400} \\
 1,600
 \end{array}$$

b. 27 is 15% of 180.

c. \$27 increased by 42% of itself equals \$38.34.

d. \$175 decreased by 8% of itself equals \$161.

e. $16\% = \frac{16}{100} = \frac{4}{25}$

2. $1,420 - 1,136 = 284$; 20% increase

3. $\$1,688 - \$950 = \$738$
 $\$738 \div \$12,300 = 6\%$

4. Hamm's share: $\$11,375 (7 \times \$1,625)$
 Miner's share: $\$8,125 (5 \times \$1,625)$
 $(\$11,375 + \$8,125 = \$19,500)$

5. $\$3,282 - \$2,500 = \$782$ $\$175.00$
 $\$782 \times 5\% = \39.10 $\times 2$
 $\$782 \times 5\% =$ $\$350.00$
 $+ 39.10$
 $\$389.10$

6. $\begin{array}{r} 2\frac{2}{5} \\ \$5.88 \\ \times 37\frac{1}{2} \\ \hline 1764 \\ 4116 \\ 294 \\ \hline \$220.50 \end{array}$

7. $72\% = .72 \times \$55.00 = \39.60

Unit 6

Section 23.

Review Assignment 23a - Part 23b

Exercises 8-9 (for Review Assignment 23a)
and Exercises 3-5 (for Part 23b).

152

Review Assignment
23a continued8. a. $\frac{2}{3}$ of \$54.75 is equal to \$36.50.

b. $\frac{1}{8}\% = .00125$

c. \$56 equals \$64 decreased by $\frac{1}{8}$ of itself.

9. $5\% \times \text{Sales} = \135

$\text{Sales} = \$135 \div 5\%$

$= \$135 \div .05 = \$2,700$

Part 23b.

3-1. 4 is 25% of 16. (may)

3-2. 18 is 30% of 60. (may not)

3-3. \$40 is 20% of \$200. (may not)

3-4. \$35 is 70% of \$50. (may)

3-5. \$20 is 80% of \$25. (may not)

3-6. 55 is 20% times 275. (may not)

3-7. 54 is 60% greater than 90. (may)

3-8. \$75 is 45% greater than \$166.67. (may not)

3-9. \$33 is 20% smaller than \$41.25. (may not)

3-10. 55 is 20% times 275. (may not)

3-11. 11 is 20% times 55. (may)

3-12. 10% of 900 equals 90. (may not)

4-1. $15\% \times \$400 = \60

4-2. $18\% \times \$200 = \36

4-3. 29% of \$330 is \$95.70.

4-4. \$5.31 is 35% of \$15.40

4-5. 46% of \$187 is \$84.64.

4-6. \$5.46 is 21% of \$26

4-7. \$56.18 is 53% of \$106.

4-8. $65\% \times \$38 = \24.70

4-9. $\$81 = 45\% \times \180 .

4-10. \$11.20 is 35% of \$32.00.

4-11. \$132 is 60% of \$220.

4-12. \$132 is 60% of \$220.

5-1. a. 2% of \$200 is \$4; 1% of \$200 is \$2;

2% of \$500 is \$10; 1% of \$500 is \$5;

2% of \$900 is \$18; 1% of \$900 is \$9;

2% of \$3,200 is \$64; 1% of \$3,200 is \$32;

2% of \$7,500 is \$150; 1% of \$7,500 is \$75.

b. 3% of \$200 is \$6; 1% of \$200 is \$2;
3% of \$500 is \$15; 1% of \$500 is \$5;
3% of \$1,200 is \$36; 1% of \$1,200 is \$12;
3% of \$2,000 is \$60; 1% of \$2,000 is \$20;
3% of \$4,000 is \$120; 1% of \$4,000 is \$40.

c. 9% of \$3,000 is \$27; 1% of \$3,000 is \$3;
9% of \$600 is \$54; 1% of \$600 is \$6;
9% of \$2,000 is \$180; 1% of \$2,000 is \$20;
9% of \$4,000 is \$360; 1% of \$4,000 is \$40;
9% of \$800 is \$72; 1% of \$800 is \$8.

d. $\frac{1}{2}\%$ of \$800 is \$4; 1% of \$800 is \$8;
 $\frac{1}{2}\%$ of \$2,000 is \$10; 1% of \$2,000 is \$20;
 $\frac{1}{2}\%$ of \$3,600 is \$18; 1% of \$3,600 is \$36;
 $\frac{1}{2}\%$ of \$12,800 is \$64; 1% of \$12,800 is \$128;
 $\frac{1}{2}\%$ of \$30,000 is \$150; 1% of \$30,000 is \$300.

e. $\frac{1}{5}\%$ of \$5,000 is \$10; 1% of \$5,000 is \$50;
 $\frac{1}{5}\%$ of \$12,500 is \$25; 1% of \$12,500 is \$125;
 $\frac{1}{5}\%$ of \$20,000 is \$40; 1% of \$20,000 is \$200;
 $\frac{1}{5}\%$ of \$1,000 is \$2; 1% of \$1,000 is \$10;
 $\frac{1}{5}\%$ of \$7,500 is \$15; 1% of \$7,500 is \$75.

2. a. 1% of \$200 is \$2; 100% of \$200 is \$200;
1% of \$1,800 is \$18; 100% of \$1,800 is \$1,800;
1% of \$6,000 is \$60; 100% of \$6,000 is \$6,000;
1% of \$100 is \$1; 100% of \$100 is \$100;
1% of \$12,000 is \$120; 100% of \$12,000 is \$12,000.

b. 2% of \$200 is \$4; 100% of \$200 is \$200;
2% of \$500 is \$10; 100% of \$500 is \$500;
2% of \$900 is \$18; 100% of \$900 is \$900;
2% of \$3,200 is \$64; 100% of \$3,200 is \$3,200;
2% of \$7,500 is \$150; 100% of \$7,500 is \$7,500.

Unit 6.

Section 23.

Part 23.b - Review Assignment 23.b.

Exercises 5-6 (for Part 23.b),

and Exercise 1 (for Review Assignment 23.b).

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Exercise 5
(Continued).

- c. 5% of \$400 is \$20; 100% of \$400 is \$400;
 5% of \$700 is \$35; 100% of \$700 is \$700;
 5% of \$3,000 is \$150; 100% of \$3,000 is \$3,000;
 5% of \$7,000 is \$350; 100% of \$7,000 is \$7,000;
 5% of \$900 is \$45; 100% of \$900 is \$900;
- d. $\frac{1}{2}$ % of \$800 is \$4; 100% of \$800 is \$800;
 $\frac{1}{2}$ % of \$2,000 is \$10; 100% of \$2,000 is \$2,000;
 $\frac{1}{2}$ % of \$200 is \$1; 100% of \$200 is \$200;
 $\frac{1}{2}$ % of \$30,000 is \$150; 100% of \$30,000 is \$30,000;
 $\frac{1}{2}$ % of \$400 is \$2; 100% of \$400 is \$400;
- e. $\frac{1}{4}$ % of \$800 is \$2; 100% of \$800 is \$800;
 $\frac{1}{4}$ % of \$2,000 is \$5; 100% of \$2,000 is \$2,000;
 $\frac{1}{4}$ % of \$400 is \$1; 100% of \$400 is \$400;
 $\frac{1}{4}$ % of \$1,600 is \$4; 100% of \$1,600 is \$1,600;
 $\frac{1}{4}$ % of \$4,000 is \$10; 100% of \$4,000 is \$4,000.

- 6-1. \$5 is 1% of \$500. 6-2. \$2 is 1% of \$200.
 6-3. \$36 is 6% of \$600. 6-4. \$20 is 5% of \$400.
 6-5. 3% of \$800 is \$24. 6-6. \$18 is 9% of \$200.
 6-7. \$14 is 2% of \$700. 6-8. 1% of \$300 is \$3.
 6-9. \$9 is 1% of \$900. 6-10. \$4 is $\frac{1}{2}$ % of \$800.
 6-11. \$8 is $\frac{1}{2}$ % of \$1,600. 6-12. \$1 is $\frac{1}{4}$ % of \$400.
 6-13. $\frac{1}{3}$ % of \$1,500 is \$5. 6-14. $\frac{2}{5}$ % of \$2,000 is \$8.
 6-15. \$9 is $\frac{3}{4}$ % of \$1,200. 6-16. 10% of \$340 = \$34.
 6-17. 30% of \$90 = \$27. 6-18. \$40 is 25% of \$160.
 6-19. \$10 is 25% of \$40. 6-20. \$30 is 75% of \$40.
 6-21. $16\frac{2}{3}$ % of \$180 is \$30. 6-22. \$60 is 100% of \$60.
 6-23. \$60 is 200% of \$30. 6-24. \$60 is 300% of \$20.

Review Assignment 23.b.

1. a. $\frac{3}{8}$ % of \$1,720 is \$6.45.
 b. \$48 is 32% of \$150.
 c. \$3.50 increased by 28% of itself equals \$4.48.

Section 23:

Preview Assignment 23.b.

Exercises 1-6.

Unit 6.

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d. $36\% = \frac{36}{100} = \frac{9}{25}$

e. \$12.50 less 2% of itself is \$12.25.

f. $45\% \times 200 = \$90$.

2. $\$13,800 - \$8,000 = \$5,800$

$\$5,800 \div \$145,000 = 4\%$

3. $\$14,500 - \$12,180 = \$2,320$; 16% decrease

	^{1 1/2}	^{1 3}	¹
7	\$7.36	\$7.36	\$11.04
8	$\times 39\frac{1}{2}$	$\times 1.5$	$\times 10.3$
7 1/2	3'68	3'680	\$33.12
9	6624	736	+290.72
+9	2208	\$11,040	\$323.84
42 1/2	\$290.72		

^{4 2/3}	¹	^{6 7/10}
\$175.00	\$10.73	\$173.00
$\times .0613$	26.80	- 39.89
1'52500	+ 2.36	\$135.11
17500	\$39.89	
105000		
\$10.727500		

6. $\$17,250 \times 5\% =$	\$862.50	\$17,250
$2,250 \times 2\% =$	45.00	- 15,000
	+ 670.00	\$2,250
	\$1,777.50	

Unit 6.

Sections 23-24.

Review Assignment 23b - Part 24a.

Exercises 7-10 (for Review Assignment 23b),
and Exercise 1 (for Part 24a).

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Review Assignment
23b October 2012

$$\begin{array}{r}
 7. \quad \$9,410 - \$9,000 = \$410 \quad \$775.00 \\
 \$11,140 - \$9,000 = \$2,140 \quad \times \quad 3 \\
 \$410 \times 6\% = \$24.60 \quad \$2,325.00 \\
 \$2,140 \times 6\% = \$128.40 \quad 24.60 \\
 \quad \quad \quad + 128.40 \\
 \hline
 \$2,478.00
 \end{array}$$

$$\begin{array}{r}
 8. a. \quad \begin{array}{r} 65.00 \text{ L} \\ 57.50 \text{ L} \\ 77.25 \text{ L} \\ 64.75 \text{ L} \\ + 80.00 \text{ L} \\ \hline 346.50 \text{ L} \end{array}
 \end{array}$$

b. 346 liters

$$\begin{array}{r}
 9. a. \quad \$3.24 \text{ is } 72\% = \$4.50 \\
 b. \quad \frac{2}{5}\% = .004
 \end{array}$$

c. 156 even - 96 increased
by $\frac{5}{8}$ of itself.

$$\begin{array}{r}
 10. \quad \$250 - \$160 = \$90 \\
 \$90 \div .03 = \$3,000
 \end{array}$$

Section 24.

Part 24a.

1-1.	Sale Price or Amount Collected	Commission		Agent's Expenses	Total Deductions	Net Proceeds
		Rate	Amount			
a.	\$15,000	6%	\$900	None	\$900	\$14,100
b.	1,350	20%	270	None	270	1,080
c.	42,800	5%	2,140	\$125.00	2,265	40,535
d.	900	35%	315	25.50	340.50	559.50
e.	72,900	7%	5,103	165.00	5,268	67,632

$$1-2. \quad 6\% \text{ of } \$41,500 = \$2,490;$$

$$\$41,500 - \$2,490 = \$39,010.$$

$$1-3. \quad 7\% \text{ of } \$150,000 = \$10,500;$$

$$\$10,500 + \$675 = \$10,175;$$

$$\$150,000 - \$10,175 = \$139,825.$$

Section 24.
Part 24a.
Exercises 1-3.

Unit 6.

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-4. 7% of $\$45,200 = \$3,164$;
 $\$3,164 + \$675 = \$3,839$;
 $\$45,200 - \$3,839 = \$41,361$;

-5. 60% of $\$750 = \450 ;
 $33\frac{1}{3}\%$ of $\$750 = \250 ;
 $\$450 + \$250 = \$700$;

-6. 50% of $\$300 = \150 ;
 35% of $\$200 = \70 ;
 25% of $\$400 = \100 ;
 $\$150 + \$70 + \$100 = \320 .

1-1. $100\% - 30\% = 70\%$;
 $\$420 \div .70 = \600 ;

1-2. $100\% - 5\% = 95\%$;
 $\$53,200 \div .95 = \$56,000$;

1-3. $100\% - 35\% = 65\%$;
 $\$243.75 \div .65 = \375.00 ;

1-4. $100\% - 6\% = 94\%$;
 $\$47,000 \div .94 = \$50,000$;

1-5. $100\% - 7\% = 93\%$;
 $\$14,000 \div .93 = \$15,054$

2-1. $100\% - 15\% = 85\%$;
 $\$714 \div .85 = \840 ;

2-2. $100\% - 14\% = 86\%$;
 $\$817 \div .86 = \950 ;

2-3. $100\% - 10\% = 90\%$;
 $\$17,550 \div .90 = \$19,500$;

2-4. $100\% - 4\% = 96\%$;
 $\$84,000 \div .96 = \$87,500$;

2-5. $100\% - 8\% = 92\%$;
 $\$828 \div .92 = \900 ;

Unit 6.

Section 24.

Review Assignment 24a.

Exercises 1-

158

Review Assignment 2-a

1. agent: (c) A person who legally acts for another.
 net proceeds: (b) Sale price minus commission and expenses.
 principal: (a) A person who uses an agent.

Are you familiar with
 To measure
 another's relative
 size?

2. a. \$225.50 is 18% less than \$275.00
 b. \$60 is 250% of \$24.
 c. \$165 is $37\frac{1}{2}\%$ greater than \$120.
 d. $3\frac{1}{2}\% = .035$

3. 6% of \$82,500 = \$4,950;
 $\$4,950 + \$246 = \$5,196$;
 $\$82,500 - \$5,196 = \$77,304$.

4. 75% of \$1,400 = \$1,050;
 35% of \$1,400 = \$490;
 $\$1,050 + \$490 = \$1,540$.

5. $\begin{array}{r} \$94,966 \\ +79,284 \\ \hline \$174,250 \end{array}$	$\begin{array}{r} \$174,280 \\ -132,142 \\ \hline \$42,108 \end{array}$	$\begin{array}{r} \$81,378 \\ -42,108 \\ \hline \$49,862 \end{array}$
---	---	---

6. $\$4,850 - \$4,000 = \$850$
 $\$850 \div 2\% = \1700
 $\$160 + \$17 = \$177$.

7. $\$910 \times 12 = \$10,920$
 $\$14,020 - \$10,920 = \$3,100$
 $\$3,100 \div \$155,000 = 2\%$

8. $896 - 784 = 112$; $12\frac{1}{2}\%$ decrease

Section 24.

Unit 6.

Review Assignment 24a - Part 24b.

Exercises 9-12 (for Review Assignment 24a),
and Exercise 4 (for Part 24b).

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$$9. 35\% \times 240 = \$84.$$

$$10. a. \$15.86 \text{ is } 65\% \text{ of } \$24.40.$$

$$b. 1.2\% = \frac{12}{1,000} = \frac{3}{250}$$

$$c. 3.45 = 3\frac{45}{100} = 3\frac{9}{20}$$

$$d. 1\frac{3}{4} = 1.75$$

$$11. 100\% - 6\% = 94\%;$$

$$\$2,772 \div .94 = \$2,949.$$

$$12. 100\% - 6\% = 94\%;$$

$$\$54,000 \div .94 = \$57,447 = \$57,450.$$

$$1-1. 100\% + 45\% = 145\%; \$3,190 \div 1.45 = \$2,200;$$

$$\$2,200 + 45\% \text{ of itself} = \$3,190.$$

$$1-2. 100\% + 4\% = 104\%; \$31.20 \div 1.04 = \$30;$$

$$\$30.00 + 4\% \text{ of itself} = \$31.20.$$

$$1-3. 100\% + 18\% = 118\%; \$885 \div 1.18 = \$750;$$

$$\$750 \text{ increased by } 18\% \text{ of itself equals } \$885.$$

$$1-4. 100\% + 6\% = 106\%; \$24.91 \div 1.06 = \$23.50;$$

$$\$24.91 = \$23.50 \text{ increased by } 6\%.$$

$$1-5. 100\% + 64\% = 164\%; \$369 \div 1.64 = \$225;$$

$$\$369 \text{ is } 64\% \text{ greater than } \$225.$$

$$1-6. 100\% + 50\% = 150\%; \$123 \div 1.50 = \$82$$

$$\$123 \text{ is } 50\% \text{ more than } \$82.$$

$$1-7. 100\% + 25\% = 125\%; \$160 \div 1.25 = \$128;$$

$$\$128 + 25\% \text{ of itself gives } \$160.$$

$$1-8. 100\% + 33\frac{1}{3}\% = 133\frac{1}{3}\%; \$600 \div 1.33\frac{1}{3} = \$450;$$

$$\$600 \text{ is } 33\frac{1}{3}\% \text{ greater than } \$450.$$

$$1-9. 100\% + 75\% = 175\%; 350 \div 1.75 = 200.$$

$$200 + 75\% \text{ of itself equals } 350.$$

Unit 6.

Section 24.

Part 24b.

Exercises 5-6.

160

- 5-1. $100\% - 15\% = 85\%$; $\$7820 \div .85 = \$9,200$;
 $\$9,200 - 15\%$ of itself = $\$7,820$.
- 5-2. $100\% - 4\% = 96\%$; $\$312 \div .96 = \325 ;
 $\$325 - 4\%$ of itself = $\$312$.
- 5-3. $100\% - 40\% = 60\%$; $\$33.60 \div .60 = \56.00 ;
 $\$56.00$ decreased by 40% of itself equals $\$33.60$.
- 5-4. $100\% - 15\% = 85\%$; $\$11.22 \div .85 = \13.20
 $\$11.22 = \13.20 decreased by 15% .
- 5-5. $100\% - 45\% = 55\%$; $\$638 \div .55 = \$1,160$;
 $\$638$ is 45% less than $\$1,160$.
- 5-6. $100\% - 16\frac{2}{3}\% = 83\frac{1}{3}\%$; $\$10.80 \div .83\frac{1}{3} = \12.96 ;
 $\$12.96$ minus $16\frac{2}{3}\%$ of itself gives $\$10.80$.
- 5-7. $100\% - 33\frac{1}{3}\% = 66\frac{2}{3}\%$; $\$12.80 \div .66\frac{2}{3} = \18.45 ;
 $\$12.80$ is $33\frac{1}{3}\%$ smaller than $\$18.45$.
- 5-8. $100\% - 12\frac{1}{2}\% = 87\frac{1}{2}\%$; $\$3.36 \div .87\frac{1}{2} = \3.84 ;
 $\$3.84$ less $12\frac{1}{2}\%$ of itself equals $\$3.36$.
- 5-9. $100\% - 25\% = 75\%$; $\$24.60 \div .75 = \32.80 ;
 $\$24.60$ is 25% smaller than $\$32.80$.
- 6-1. $\$48$ is 60% as much as $\$30$.
- 6-2. $\$50$ is 25% more than $\$40$.
- 6-3. 20 is 25% of 80 .
- 6-4. $\$36$ is $16\frac{2}{3}\%$ more than $\$30$.
- 6-5. 50 is $16\frac{2}{3}\%$ less than 60 .
- 6-6. 9 is 25% of 36 .
- 6-7. $\$20$ is 25% more than $\$16$.
- 6-8. 24 is 25% less than 32 .
- 6-9. $\$48$ is $33\frac{1}{3}\%$ more than $\$36$.
- 6-10. 12 is 20% of 60 .
- 6-11. 24 is 20% more than 20 .
- 6-12. $\$1.80$ is 6% of $\$30$.

Section 24.

Unit 6.

Part 24b - Review Assignment 24b.

Exercise 6 (for Part 24b),

and Exercises 1-2 (for Review Assignment 24b).

161

5-13. 40 is 20% as much as 200.

5-14. \$24 is 40% of \$60.

5-15. 20% more than 40 is 48.

5-16. \$30 is 60% of \$50.

5-17. \$20 is $33\frac{1}{3}\%$ more than \$15.

5-18. 25% less than \$20 is \$15.

5-19. 12 is $33\frac{1}{3}\%$ more than 9.

5-20. 40% less than \$20 is \$12.

5-21. \$24 is 75% as much as \$32.

5-22. 60 is 30% of 200.

5-23. \$10 is 80% less than \$50.

5-24. 9 is 300% of 3.

5-25. 150% of 12 is 18.

5-26. 10 is 200% of 5.

5-27. 70 is 20% more than 50.

5-28. 30 is 20% more than 25.

1. a. $\frac{3}{4}\%$ of \$192 is \$1.44.

b. $0.326 = 32.6\%$.

c. \$245 is $16\frac{2}{3}\%$ percent greater than \$210.

d. \$3.50 is $33\frac{1}{3}\%$ percent smaller than \$5.25.

e. \$8.75 increased by 36% of itself = \$11.90.

f. \$27.50 decreased by 28% of itself = \$26.73.

g. $1\frac{1}{2}\% = .015$

h. 268 km decreased by 25% = 201 km

2. 60% of \$635 = \$381.00;

32% of \$635 = \$203.20;

\$381.00 + \$203.20 = \$584.20.

Unit 6.

Section 24.

Review Assignment 24b - General Review,
Exercises 3-7 (for Review Assignment 24b),
and, Exercise 1 (for General Review).

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Review Assignment
24b

$$3. \quad 5\% \text{ of } \$2,900 = \$145;$$

$$\$145 + \$93.65 = \$238.65;$$

$$\$2,900 - \$238.65 = \$2,661.35$$

$$4. \quad 6\% \text{ of } \$3,500 = \$210.00;$$

$$45\% \text{ of } \$231.00 = \$103.95.$$

$$5. \quad \begin{array}{r} \$100 \\ \times 4 \\ \hline \$400 \end{array}$$

$$\begin{array}{r} \$13.75 \\ \times 4 \\ \hline \$55.00 \end{array}$$

$$6. \text{ a. } \$13,800 \div 35\%$$

$$2. \$36.00.$$

$$3. \$41.25 \div 10\%$$

$$\text{monthly } \$31.50.$$

$$4. \$35.00 \div 10\%$$

$$10\% \text{ of } \$35.00 = \$3.50$$

$$7. \quad \begin{array}{r} 100\% - 32\% = 68\% \\ \$187 \div .68 = \$275.00 \end{array}$$

$$\begin{array}{r} 30 \\ 28 \\ \hline 6 \end{array}$$

$$7. \quad 100\% - 32\% = 68\%$$

$$\$187 \div .68 = \$275.00.$$

General
Review

$$1. \text{ a. } \begin{array}{r} 8571 = 857 \\ 7 \overline{) 6.0000} \\ \underline{56} \\ 40 \\ \underline{35} \\ 50 \\ \underline{49} \\ 10 \\ \underline{7} \\ 3 \end{array}$$

$$7 \overline{) 6.0000}$$

$$\underline{56}$$

$$40$$

$$\underline{35}$$

$$50$$

$$\underline{49}$$

$$10$$

$$\underline{7}$$

$$3$$

$$b. \quad 0.34 = \frac{34}{100} = \frac{17}{50}$$

$$c. \quad 0.356 = 35.6\%$$

$$d. \quad \frac{5}{14} = \frac{3571}{10000} = 35.7\%$$

$$(4) \overline{) 5.0000}$$

$$\underline{42}$$

$$80$$

$$\underline{70}$$

$$100$$

$$\underline{98}$$

$$20$$

$$\underline{14}$$

$$6$$

Section 24.
General Review.
Exercises 1-7.

Unit 6.

163

- e. \$60 is $37\frac{1}{2}\%$ of \$160.
f. 250 km is $16\frac{2}{3}\%$ less than 300 km.

Hester Reynolds Reconciliation Statement September 1, 1980			
Checkbook balance:	\$ 431.20	Bank statement balance:	\$546.10
Less:		Less outstanding checks:	
Service charge	1.55	#245	\$ 21.25
		#246	32.70
		#247	18.50
		#248	44.00
			116.45
Correct checkbook balance:	\$429.65	Available bank balance:	\$429.65

3. $\begin{array}{r} \$30.00 \\ +641.13 \\ \hline \$671.13 \\ -6.67 \\ \hline \$664.46 \end{array}$ $\begin{array}{r} \$664.46 \\ -663.77 \\ \hline \$.89 \end{array}$
Short;
by 89¢.

4. $729 - 675 = 54$;
8% increase.

5. \$177,500 increased by
16% of itself equals \$205,900.

6. $\begin{array}{r} \$1,448 \\ \times 8 \\ \hline \$11,584 \end{array}$ $\begin{array}{r} \$11,584 \\ +1,660 \\ \hline 2,088 \\ +1,564 \\ \hline \$16,896 \end{array}$

$\begin{array}{r} \$1,536 \\ 11 \overline{) \$16,896} \\ \underline{11} \\ 58 \\ \underline{55} \\ 39 \\ \underline{33} \\ 66 \\ \underline{66} \end{array}$

7. $\$800 \times 12 = \$9,600$;
 $\$19,160 - \$9,600 = \$9,560$.
 $\$9,560 \div \$191,200 = 5\%$

Unit 6. Section 24.
General Percent.
Exercises 8-12.

164

8. $\$19,700 - \$16,000 = \$3,700.$ $\$870.00$
 $3\% \text{ of } \$19,700 = \$591.$ 591.00
 $\frac{1}{2}\% \text{ of } \$3,700 = \$18.50.$ $+ 18.50$
 $\$1,479.50$

9. $\$4.00 \text{ kg}$ $\$ \text{ Kerring}$
a. $3.5 \overline{) \$14.00}$ b. $20 \overline{) \$14.00}$
 140.00 12.2

10. a. $\$700$ is $4\frac{1}{2}\%$ of $\$16,000.$
b. $\$2.52$ is 5% more than $\$2.40.$
c. The $1\frac{1}{2}\%$ of $\$100$ is $\$1.50.$
d. 360 ft is equal to $\frac{5}{8}$ of $576 \text{ ft}.$

11. $\$1,350$ $\$650 \div .025 = \$26,000.$
 $- 1,350$
 $\$650$

12.

Karrin Olson
Reconciliation Statement
August 31, 1920

Checkbook balance: $\$957.20$	Bank statement balance: $\$971.65$
Less:	Unreconciling checks:
Check not recorded	#45 $\$31.16$
in checkbook	#46 14.73
21.36	#47 24.90
	70.79
	Subtotal: $\$900.84$
	Add: Deposit not recorded 35.00
Correct checkbook balance: $\$935.84$	Available bank balance: $\$935.84$

Section 25.
Part 25a.
Exercise 1-6.

Unit 7.

Unit 7, Section 25.

165

1-1.	Face of Note	Time	Rate	Interest	Total Due at Maturity
a.	\$350	2 yr.	6%	\$42.00	\$392.00
b.	400	3 yr.	8%	96.00	496.00
c.	600	1½ yr.	5%	45.00	645.00
d.	760	3 mo.	9%	17.10	777.10
e.	750	2 mo.	8%	10.00	760.00
f.	700	10 mo.	6%	35.00	735.00
g.	800	2¼ yr.	7½%	135.00	935.00

1-2. Interest for 1 year: $\$4,200 \times 8\% = \336.00 ;
Interest for 2½ years: $\$336.00 \times 2\frac{1}{2} = \840.00 ;
 $\$4,200 + \$840 = \$5,040$

1-3. Interest for 1 year: $\$1,200 \times 6\% = \72.00 ;
Interest for 8 months: $\$72.00 \times \frac{8}{12} = \48.00 ;
 $\$1,200 + \$48 = \$1,248$

1-4. Interest for 1 year: $\$800 \times 8\frac{1}{2}\% = \68.00 ;
Interest for 9 months: $\$68 \times \frac{9}{12} = \51.00 ;
 $\$800 + \$51 = \$851$

1-5. Interest for 1 year: $\$400 \times 7\frac{1}{4}\% = \29.00 ;
Interest for 4 months: $\$29.00 \times \frac{4}{12} = \9.67 ;
 $\$400.00 + \$9.67 = \$409.67$

1-6. Interest for 1 year: $\$1,750 \times 6\frac{3}{4}\% = \118.13 ;
Interest for 3 years: $\$118.13 \times 3 = \354.39 ;
 $\$1,750.00 + \$354.39 = \$2,104.39$

Unit 7.

Section 2.5.

Review Assignment 25a

Exercises 1-4.

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Review Assignment 25a.

1. amount due at maturity: (b) The total of principal and interest.
 date of note: (d) The day the note was signed.
 due date or date of maturity: (a) The day the loan is to be repaid.
 face or principal: (f) The amount borrowed.
 interest: (c) The dollar cost of using a lender's money.
 interest rate: (e) (i) The payment of interest.
 paying up note: (g) To pay the principal and interest.
 to pay without interest: (h) To pay the principal only.
 to pay with interest: (i) To pay the principal and interest.

2. in 4% of \$50 is \$2.

b. $1.3 \times 150 = 195$

c. \$50 is 25% of \$200

d. \$15 is 120% of \$12.50

e. $4\frac{1}{2}\% = .045$ f. $1\frac{1}{2}\% = .015$

g. 25% of 1.4 L = .35 L

3. Interest by Lora: $\$6,500 \times 5\% = \325
 Interest by Lora: $\$325 \times 1\frac{1}{2} = \487.50

4. Client's Net Pay:
 Withholding allowance: 4
 Gross earnings: \$234.40
 Withholding tax: \$19.70
 FICA tax: \$14.37

Section 25.
Review Assignment 25a.
Exercises 5-11.

5. $\$258.75$
4) $\$1,035.00$
8
23
20
35
32

$\$240$
 $\times 4$
 $\$960$

A salary of
 $\$1,035$ a
month.

30
28
20
20

7. $\$6.00$
 $\times 40$
 $\$240.00$

 $\$9.00$
 $\times 5$

$\$6.00$
 $\times 1.5$
3000
600
 $\$9.000$

8. $45\% \times \$320$
 $= \$144.$

$\$45.00$
 $\$240.00$
 $+ 45.00$
 $\$285.00$

9. 25.00 ha
42.50 ha
0.75 ha
 $+ 10.40$ ha
78.65 ha

$\times .0613$
85500
28500
171000
 $\$17.470500$

 $\$17.47$
 $+ 42.08$
 $\$59.55$
 $\$225.45$

$\$250.00$
 $\times 78.65$
125000
150000
200000
175000

19,662,5000
 $= \$19,662.50$

10. a. $\$455$ is $3\frac{1}{2}\%$ of $\$13,000$.
b. $\$85.00$ decreased by 10%
of itself equals $\$76.50$.
c. $\$448$ equals $\$268$ increased
by $\frac{3}{4}$ of itself.

11. $\$9,750 \div .05 = \$195,000.$

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2-1. $\$500 @ 6\% (\$30) \text{ for } 1 \text{ yr.} = \$30.$

2-2. $\$100 @ 6\% (\$6) \text{ for } 4 \text{ yr.} = \$24.$

2-3. $\$500 @ 6\% (\$18) \text{ for } \frac{1}{2} \text{ yr.} = \$9.$

2-4. $\$200 @ 9\% (\$18) \text{ for } 1 \frac{1}{2} \text{ yr.} = \$18.$

2-5. $\$400 @ 6\% (\$24) \text{ for } \frac{1}{4} \text{ yr.} = \$6.$

2-6. $\$700 @ 3\% (\$21) \text{ for } 1 \text{ yr.} = \$21.$

2-7. $\$300 @ 7\% (\$21) \text{ for } 2 \text{ yr.} = \$42.$

2-8. $\$50 @ 16\% (\$8) \text{ for } 1 \text{ yr.} = \$8.$

2-9. $\$100 @ 4\frac{1}{2}\% (\$4.50) \text{ for } 2 \text{ yr.} = \$9.$

2-10. $\$200 @ 8\% (\$16) \text{ for } 1 \frac{1}{2} \text{ yr.} = \$24.$

3-1. $\$300 @ 6\% (\$18) \text{ for } 3 \text{ months } (\frac{1}{4}) = \$4.50.$

3-2. $\$500 @ 9\% (\$45) \text{ for } 3 \text{ months } (\frac{1}{4}) = \$11.25.$

3-3. $\$220 @ 5\% (\$11) \text{ for } 4 \text{ months } (\frac{1}{3}) = \$3.67.$

3-4. $\$400 @ 9\% (\$36) \text{ for } 1 \text{ month } (\frac{1}{12}) = \$3.$

3-5. $\$750 @ 4\% (\$30) \text{ for } 5 \text{ months } (\frac{5}{12}) = \$12.50.$

3-6. $\$1,200 @ 7\% (\$84) \text{ for } 2 \text{ months } (\frac{1}{6}) = \$14.$

3-7. $\$3,450 @ 10\% (\$345) \text{ for } 8 \text{ months } (\frac{2}{3}) = \$230.$

3-8. $\$2,400 @ 8\% (\$192) \text{ for } 1 \text{ month } (\frac{1}{12}) = \$16.$

3-9. $\$1,500 @ 6\% (\$90) \text{ for } 10 \text{ months } (\frac{5}{6}) = \$75.$

3-10. $\$2,000 @ 8\frac{1}{2}\% (\$170) \text{ for } 6 \text{ months } (\frac{1}{2}) = \$85.$

$$4-1. a. \$325 \times 0.06 \times \frac{180}{365} = \$19.50 \times \frac{180}{365} = \$7.80 \text{ interest for 180 days}$$

$$b. \$1,256 \times 0.05 \times \frac{125}{365} = \$73.56 \times \frac{125}{365} = \$25.14 \text{ interest for 125 days}$$

$$c. \$230 \times 0.05 \times \frac{125}{365} = \$11.50 \times \frac{125}{365} = \$3.94 \text{ interest for 125 days}$$

$$d. \$422 \times 0.04 \times \frac{300}{365} = \$16.88 \times \frac{300}{365} = \$13.87 \text{ interest for 300 days}$$

$$e. \$725 \times 0.02 \times \frac{110}{365} = \$14.50 \times \frac{110}{365} = \$4.38 \text{ interest for 110 days}$$

$$f. \$800 \times 0.08 \times \frac{180}{365} = \$64.00 \times \frac{180}{365} = \$31.23 \text{ interest for 180 days}$$

$$4-2. \$1,100 \times 0.05 \times \frac{180}{365} = \$55.00 \times \frac{180}{365} = \$27.12 \text{ interest for 180 days}$$

Section 25.
Part 25b.
Exercises 4-6.

Unit 7.

169

7-3. a. $\$3,000 \times 0.08 \times \frac{270}{365} = \$240 \times \frac{58}{54} = \42.90 interest for 270 days
b. $\$3,000 + \$42.90 = \$3,042.90$

7-1. a. $\$300 \times .06 \times \frac{60}{360} = \$18.00 \times \frac{1}{6} = \3.00 interest for 60 days
b. $\$600 \times .08 \times \frac{90}{360} = \$48.00 \times \frac{1}{4} = \12.00 interest for 90 days
c. $\$900 \times .05 \times \frac{120}{360} = \$45.00 \times \frac{1}{3} = \15.00 interest for 120 days
d. $\$400 \times .09 \times \frac{180}{360} = \$36.00 \times \frac{1}{2} = \18.00 interest for 180 days
e. $\$750 \times .04 \times \frac{270}{360} = \$30.00 \times \frac{3}{4} = \22.50 interest for 270 days
f. $\$1,200 \times .07 \times \frac{36}{360} = \$84.00 \times \frac{1}{10} = \8.40 interest for 36 days
g. $\$3,450 \times .10 \times \frac{240}{360} = \$345.00 \times \frac{2}{3} = \230.00 interest for 240 days
h. $\$2,400 \times .08 \times \frac{20}{360} = \$192.00 \times \frac{1}{18} = \10.67 interest for 20 days
i. $\$1,500 \times .06 \times \frac{45}{360} = \$90.00 \times \frac{1}{8} = \11.25 interest for 45 days
j. $\$2,000 \times .08 \times \frac{300}{360} = \$170.00 \times \frac{5}{6} = \141.66 interest for 300 days

7-2. $\$450 \times .08 \times \frac{60}{360} = \$36.00 \times \frac{1}{6} = \6.00 interest for 60 days

7-3. $\$960 \times .09 \times \frac{120}{360} = \$86.40 \times \frac{1}{3} = \28.80 interest for 120 days

7-4. a. $\$3,650 \times .08 \times \frac{180}{360} = \$292.00 \times \frac{1}{2} = \146.00 interest for 180 days
b. $\$3,650 + \$146 = \$3,796$

7-5. $\$650 \times .08 \times \frac{90}{360} = \$55.25 \times \frac{1}{4} = \13.82 interest for 90 days

7-6. a. $\$2,000 \times .08 \times \frac{90}{365} = \$160.00 \times \frac{18}{73} = \39.45 interest for 90 days
b. $\$2,000 \times .08 \times \frac{90}{360} = \$160.00 \times \frac{1}{4} = \40.00 interest for 90 days
c. $\$40.00 - \$39.45 = \$0.55$

	Principal	Time	Interest	Rate
1.	\$800	30 days	\$4.00	6%
2.	\$400	60 days	\$6.00	9%
3.	\$200	90 days	\$3.50	7%
4.	\$750	120 days	\$20.00	8%

Unit 7.

Section 25.

Part 25b - Review Assignment 25b.

Exercises 6-7 (for Part 25b),

and Exercises 1-2 (for Review Assignment 25b).

170.

Exercises 6
(continued).

	Principal	Time	Interest	Rate
6-5.	\$1,400	180 days	\$70.00	10%
6-6.	\$870	2 months	\$7.25	5%
6-7.	\$650	6 months	\$19.50	6%
6-8.	\$500	3 months	\$10.00	8%
6-9.	\$600	8 months	\$30.00	7½%
6-10.	\$1,000	10 months	\$75.00	9%
6-11.	\$2,000	18 months	\$300.00	10%
6-12.	\$1,200	15 months	\$120.00	8%

7-1. Principal: \$4,000 Time: 90 days
Interest: \$80 Rate: 8%

7-2. Principal: \$300 Time: 30 days
Interest: \$9.75 Rate: 9%

7-3. Principal: \$2,000 Time: 1½ years
Interest: \$165 Rate: 5½%

7-4. Principal: \$3,000 Time: 21 months
Interest: \$315 Rate: 6%

Review Assignment
Part 25b.

1. approximate: (a) The percent of the principal that is charged for one year.

banker's or ordinary interest: (a) Uses a 360-day year
exact or accurate interest: (b) Uses a 365-day year

2. a. $1.7 = 170\%$.

b. \$40 is 160% of \$25.

c. $5\frac{1}{2}\% = .055$

d. 650 grams is 65% of a kilogram.

Section 25.
Review Assignment 25b.
Exercises 3-10.

Unit 7.

171

3. Principal: \$900 Time: 60 days
Interest: \$13.50 Rate: 9%

4. \$800 @ 6% (\$48.00) for 1 yr. 6 mo. = \$72.00.

^{33 21} $\$16,890$ $15,475$ $17,320$ $18,845$ $+ 17,960$ $\$86,490$	⁴¹ $\$17,300$ $\times 6$ $\$103,800$	^{9 13 7 10} $\$103,800$ $- 86,490$ $\$17,310$
--	--	---

5. Barnes' share: \$15,300 (\$5,100 \times 3 = \$15,300).
Wallace's share: \$20,400 (\$5,100 \times 4 = \$20,400).
\$15,300 + \$20,400 = \$35,700.

$\$205$ $52 \overline{) \$10,660}$ 104 260 260	$33\frac{1}{2}$ $- 1\frac{1}{2}$ $33\frac{1}{2}$	$\$5.90$ $\times 33\frac{1}{2}$ 1295 1770 1770 $\$197.65$
--	--	--

6. \$325 - \$200 = \$125
\$125 \div \$5,000 = 2½%

7. 60% of \$815 = \$489.00;
35% of \$815 = \$285.25;
\$489.00 + \$285.25 = \$774.25.

Unit 7.

Section 25-26.

Review-Assignment 25b-Part 26a.

Exercises 11-14 (for Review Assignment 25b),
and Exercises 1-2 (for Part 26a).

172

Refers to
Aug 25 (continued).

11. \$9.60	\$.60	\$.60	\$.95
$\times 3$	$48) \$28.80$	$\times 8$	$\times 40$
<u>\$28.80</u>	<u>28.80</u>	<u>\$4.80</u>	<u>\$38.00</u>
			<u>-28.80</u>
			\$ 9.20

12. a. \$45 is $7\frac{1}{2}\%$ of \$600.

✓ $\therefore \$5.32$ is 5% less than $\$5.60$.

13. $\$1,680 \div .07 = \$24,000.$

14. $100\% - 33\% = 64\%$
 $\$208 \div .64 = \325

Dec 26

25a

Date	Time	Date of maturity	Date	Time	Date of maturity
2-1.	Aug. 4	90 days 11/2	2-7.	Mar. 5	30 days 4/4
2-2.	May 9	60 days 7/8	2-8.	Nov. 18	75 days 2/2
2-3.	Oct. 21	90 days 1/19	2-9.	Sept. 7	90 days 12/6
2-4.	July 5	60 days 9/3	2-10.	Mar. 1	30 days 3/31
2-5.	Jan. 12	45 days 2/26	2-11.	Jan. 6	120 days 5/6
2-6.	April 3	80 days 6/22	2-12.	April 7	45 days 5/22

Section 26.

Unit 7.

Review Assignment 26a-Part 26b.

Exercises 1-4 (for Review Assignment 26a),
and Exercises 3-4 (for Part 26b).

173

1. a. $1.5 = 150\%$.

b. \$45 is $37\frac{1}{2}\%$ of \$120.

c. $2\frac{1}{2}\% = .025$

d. Due date of 90-day note dated May 17: Aug. 15.

e. Due date of 3-month note dated May 31: Aug. 31.

2. Due date of 60-day note dated March 8: May 7.

$$\$975 \times .08 \times \frac{60}{360} = \$975 \times \frac{1}{6} = \$162.50 \text{ interest for 60 days.}$$

3. $\$1,350 \times 9\% (\$121.50) \text{ for 18 mos.} = \$182.25.$

4. Principal: \$900 Time: 60 days
Interest: \$10.50 Rate: 7%

3-1. $\$800 @ 5\% \text{ for 15 days}$
 $= \$.2083 \times 8 = \1.67

3-2. $\$500 @ 4\% \text{ for 20 days}$
 $= \$.2222 \times 5 = \1.11

3-3. $\$200 @ 8\% \text{ for 21 days}$
 $= \$.4667 \times 2 = \$.93$

3-4. $\$100 @ 5\frac{1}{2}\% \text{ for 6 days}$
 $= \$.0917 \times 1 = \$.09$

3-5. $\$400 @ 7\frac{1}{2}\% \text{ for 1 month}$
 $= \$.6250 \times 4 = \2.50

3-6. $\$250 @ 4\frac{1}{2}\% \text{ for 30 days}$
 $= \$.3750 \times 2\frac{1}{2} = \$.94$

3-7. $\$450 @ 6\% \text{ for 60 days}$
 $= \$1.0000 \times 4\frac{1}{2} = \4.50

3-8. $\$1,200 @ 7\% \text{ for 6 months}$
 $= \$3.5000 \times 12 = \42.00

3-9. $\$2,150 @ 9\% \text{ for 90 days}$
 $= \$2.25 \times 21\frac{1}{2} = \48.38

3-10. $\$50 @ 6\% \text{ for 6 days}$
 $= \$.1000 \times \frac{1}{2} = \$.05$

4-1. a. $\$200 @ 6\frac{1}{2}\% \text{ for 45 days}$
 $= \$.5417 \times 2 = \$1.0834;$

b. $\$300 @ 6\% \text{ for 50 days}$
 $= \$.5000 \times 3 = \$1.50;$

$\$.2708 \times 2 = \$.5416;$

$\$.3333 \times 3 = \$.9999;$

$\$1.0834 + \$.5416 = \$1.63.$

$\$1.50 + \$.9999 = \$2.50.$

c. $\$100 @ 8\% \text{ for 93 days}$

$= \$2.0000 \times 1 = \$2.00;$

$\$.0667 \times 1 = \$.07;$

$\$2.00 + \$.07 = \$2.07.$

d. $\$3,500 @ 5\% \text{ for 70 days}$

$= \$.8333 \times 35 = \$29.1655;$

$\$.1389 \times 35 = \$4.8615;$

$\$29.1655 + \$4.8615 = \$34.03.$

Unit 7.

Section 26.

Part 26b - Review Assignment 26b.

Exercises 1-3 (for Part 26b),

and Exercise 1 (for Review Assignment 26b).

174

Exercise 4

e. \$850 @ 7% for 119 days

$$= \$1,7500 \times 8\frac{1}{2} = \$14,875;$$

$$\$5637 \times 8\frac{1}{2} = \$4,793.15;$$

$$\$14,875 + \$4,793.15 = \$19,67.$$

g. \$400 @ 9% for 20 days

$$= \$2,778 \times 4 = \$1,112;$$

$$\$1,2500 \times 4 = \$1,00;$$

$$\$1,112 + \$1,00 = \$2,11.$$

i. \$2,500 @ 8% for 40 days

$$= \$1,5557 \times 25 = \$16,6675;$$

$$\$2,222 \times 25 = \$5,555;$$

$$\$16,6675 + \$5,555 = \$22,223.$$

f. \$500 @ 10% for 1 month

$$= \$4167 \times 5 = \$2,0835;$$

$$2 \times \$2,0835 = \$4,17.$$

h. \$100 @ 12% for 36 days

$$= \$5000 \times 1 = \$5,000;$$

$$\$1,000 \times 1 = \$1,000;$$

$$\$5,000 + \$1,000 = \$6,00;$$

$$2 \times \$6,00 = \$12,00.$$

j. \$90 @ 7% for 65 days

$$= \$1,6667 \times \frac{9}{10} = \$1,5003;$$

$$\$1,000 \times \frac{9}{10} = \$0,900;$$

$$\$1,5003 + \$0,900 = \$2,4003.$$

4-2. a. \$300 @ 8% for 75 days

$$= \$1,333 \times 3 = \$3,999;$$

$$\$2,333 \times 3 = \$6,999;$$

$$\$3,999 + \$6,999 = \$10,998.$$

b. \$300 @ 8% for 75 days

$$= \$300 \times \frac{15}{72} = \$62,50;$$

$$\$300 + \$62,50 = \$362,50.$$

4-3. a. \$800 @ 7% for 45 days

$$= \$1,92 \times \frac{1}{8} = \$1,00;$$

$$\$800 + \$1,00 = \$801.$$

b. \$800 @ 7% for 45 days

$$= \$5833 \times 8 = \$4,6664;$$

$$\$2,917 \times 8 = \$2,3336;$$

$$\$4,6664 + \$2,3336 = \$7,00.$$

Review Assignment

1. a. 2.1 = 210%.

b. \$255 is 150% of \$170.

$$c. 4\frac{1}{4}\% = .0425.$$

$$d. 15.8\% = .158.$$

e. Due date of 6-month note dated Oct. 31: Apr. 30.

f. Due date of 90-day note dated Mar. 15: June 13.

Sections 26-27.

Unit 7.

Review Assignment 26b - Section 27.

Exercises 2-7 (for Review Assignment 26b),
and Exercise 1 (for Section 27).

175

2. $\$450 \times 6\frac{1}{2}\% (\$29.25) \text{ for 18 months} = \$43.88.$

3. a. Due date of 120-day note dated June 29: Oct. 27.

b. $\$600 \times .08 \times \frac{120}{360} = \$600 \times \frac{1}{3} = \$200;$

$\$600 + \$200 = \$800.$

4. $\begin{array}{r} \$850 \\ \times 12 \\ \hline \$10,200 \end{array}$ $\begin{array}{r} \$12,670 \\ - 10,200 \\ \hline \$2,470 \end{array}$ $\$2,470 \div \$61,750 = 4\%.$

$\begin{array}{r} \$10,200 \\ - 10,200 \\ \hline \$0 \end{array}$

$\$10,200 - \$2,470 = \$7,730$

5. $7\% \text{ of } \$32,750 = \$2,292.50;$

$\$2,292.50 + \$177.55 = \$2,470.05;$

$\$32,750.00 - \$2,470.05 = \$30,279.95.$

6. a. $75\% \text{ of } \$4.80 = \$3.60.$

b. $\$25.44 \text{ is } 4\% \text{ less than } \$26.50.$

c. $\$.75 \text{ increased by } \frac{2}{3} \text{ of itself gives } \$1.05.$

7. $100\% - 8\% = 92\%;$

$\$216.00 \div .92 = \$234.78.$

Section 27.

	Date of Note	Face	Time	Discount Rate	Proceeds	Due Date
-1.	July 26	\$750	60 days	6%	\$742.50	Sept. 24
-2.	Sept. 3	1,620	60 days	6%	1,603.80	Nov. 2
-3.	Jan. 16	546	30 days	6%	543.27	Feb. 15
-4.	Mar. 6	1,240	30 days	6%	1,233.80	Apr. 5

Unit 7.

Section 27 - Review Assignment 27.

Exercise 1 (for Section 27),

and Exercises 1-2 (for Review Assignment 27).

176

Exercise 1
(continued).

1-5. Discount rate: 6% Time: 60 days

Face: \$584 Date of note: May 3.

a. $\$584 - 6\% \text{ of } \$584 \div 6 (\$35.04) = \548.96

b. Date of maturity: July 2.

c. \$584.

1-6. Time: 20 days Face: \$789.

Date: August 17. Discount rate: 6%.

a. $\$789 - 6\% \text{ of } \$789 \div 18 (\$2.63) = \786.37

b. Date of maturity: September 6.

c. \$789.

1-7. Discount rate: 6%, Time: 90 days.

Face: \$380 Date of note: November 1.

a. $\$380 - 6\% \text{ of } \$380 \div 4 (\$5.70) = \374.30

b. Date of maturity: January 30.

c. \$380.

Review Ques.

1. bank discount: (b) Interest collected in advance.

discounting a note: (a) Signing a note and paying discount immediately.

non-interest-bearing note: (a) A note without interest.

(b) (c) Face less discount
rate of discount or discount rate: (d) Percent charged on a note and paid in advance.2. a. $2 = 200\%$.

b. $4\frac{1}{2}\% \text{ of } \$328 = \$14.76$.

c. \$2.40 is $33\frac{1}{3}\%$ of \$7.20.

d. \$1,125 is 300% of \$375.

Section 27.

Unit 7.

Review Assignment 27.
Exercises 2-9.

177

e. $3\frac{1}{4}\% = .0325$

f. $33.4\% = .334$

g. Due date of 4-month note dated April 30: August 30.

h. $3\ 428\text{ mL} = 3.428\text{ L}$

3. Date: March 25. Discount rate: 6%.

Time: 60 days. Face: \$325.

a. $\$325 - 6\%$ or $\$325 \div 6 (\$3.25) = \$321.75$.

b. Date of maturity: May 24.

c. \$325.

4. a. Due date of 120-day note dated Oct. 8: Feb. 5.

b. $\$925.50 \times 6\% (\$55.53)$ for 120 days: \$18.51.

5. Principal: \$720 Time: 90 days

Interest: \$16.20 Rate: 9%

6. \$400 @ $8\frac{1}{2}\%$ for 15 months

$= \$3.5417 \times 4 = \$14.1668;$

$3 \times \$14.1668 = \$50.17.$

7. $\$9,500 + 15\%$ of \$9,500 = \$10,925.

8. $\$18,150$

$\$15,150 \times 4\% = \606.00

$-12,500$

$\$2,600 \times 1\% = \26.00

$\$2,600$

$\$950 + \$606 + \$26 = \$1,582$

$\begin{array}{r} 5' \\ 3' \end{array}$

9. $\$3.75$

$\times 2.75_m$

$\hline 18'75$

2625

750

$\$10.3125 = \10.31

Unit 7. Section 28.
Part 28a.
Exercise 1.

178

Section 28.

- 1-1. a. Oct. 7 to Jan. 10: 95.
b. Oct. 23 to Dec. 17: 55.
c. Mar. 9 to May 9: 61.
d. May 15 to Aug. 5: 82.
e. Feb. 1 to Sept. 18: 201.
f. Nov. 3 to Feb. 28: 117.
g. April 12 to July 10: 89.
h. Nov. 28 to Feb. 25: 89.
i. July 25 to Aug. 4: 10.

1-2. November 6 to February 9: 95.

1-3. May 16 to August 30: 106.

- 1-4. a. March 3 to June 1: 90.
b. 8% of \$1,000 = \$80.
c. \$1,000 + \$80 = \$1,080.

- 1-5. a. 9% of \$2,000 = \$180.
c. \$2,000 + \$180 = \$2,180.
July 15 to September 28: 75.

- 1-6. 6% of \$870 = \$52.20
May 2 to July 11: 70.
 $360 \div 70 = 5\frac{1}{7}$.
 $\$52.20 \div 5\frac{1}{7} = \10.15 .
 $\$870.00 + \$10.15 = \$880.15$.

- 1-7. 7% of \$4,800 = \$336.
November 6 to February 4: 90.
 $360 \div 90 = 4$.
 $\$336 \div 4 = \84 .
 $\$4,800 + \$84 = \$4,884$.

Section 28.

Unit 7

Part 28a - Review Assignment 28a.

Exercise 1 (for Part 28a),

and Exercises 1-3 (for Review Assignment 28a).

179

1-8. $8\frac{1}{2}\%$ of $\$1,800 = \153 .

March 27 to July 25: 120.

$$360 \div 120 = 3.$$

$$\$153 \div 3 = \$51.$$

$$\$1,800 + \$51 = \$1,851.$$

1. collateral: (a) Personal property used to back up a loan.

collateral loan: (b) A note that must be paid when the bank asks for payment.

collateral note: (d) A note backed up by collateral.

demand loan: (c) A collateral loan payable on demand.

demand note: (e) Any loan with both a note and collateral.

2. a. 1.25 equals 125%.

b. 1 equals 100%.

c. $\frac{3}{8}$ equals $37\frac{1}{2}\%$.

d. $\$15$ is $11\frac{1}{7}\%$ of $\$135$.

e. $1\frac{1}{2}\%$ of 164 = 2.46.

f. $3\frac{3}{4}\% = .0375$.

g. $115\% = 1.15$.

h. 30% of $\$19.50 = \5.75 .

i. March 28 to June 1: 65 days.

j. $\$1,300 \times 8\%$ ($\$104$) for 30 days = $\$8.67$.

3. 7% of $\$600 = \42 .

August 10 to October 24: 75 days.

$$360 \div 75 = 4.8.$$

$$\$42.00 \div 4.8 = \$8.75.$$

$$\$600.00 + \$8.75 = \$608.75.$$

Unit 7.

Section 28.

Review Assignment 28a - Part 28b.
Exercises 4-9 (for Review Assignment 28a),
and Exercise 2 (for Part 28b).

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Review Assignment 28a (continued)

4. Principal: \$5,850. Time: 90 days.
Interest: \$87.75. Rate: 6%.

5.
$$\begin{array}{r} 98 \quad 90 \quad 470 \\ 82 \times 5 - 357 \\ 90 \quad 450 \quad 93 \\ + 87 \\ \hline 357 \end{array}$$
 The student must get a score of 93 on the fifth test to average 90.

6. $27,000 - 22,500 = 4,500$; $16\frac{2}{3}\%$ increase.

7. 8% of \$900 = \$72; $360 \div 60 = 6$;
\$72 \div 6 = \$12.

a. \$927 - \$12 = \$885.

b. Due date of 60-day note dated July 22: Sept. 20.

8. 6% of \$52,800 = \$3,168.

\$3,168.00 - \$137.25 = \$3,030.75.

\$52,800.00 - \$3,030.75 = \$49,769.25.

9. a. \$22.44 is 12% smaller than \$25.50

b. $2.432 = 2\frac{432}{1000} = 2\frac{54}{125}$

c. \$36 is $\frac{4}{9}$ of \$27.

Part 28b. 2-1. \$9,600; \$9,440; \$9,280; \$9,120;
\$8,960.

2-2. \$10,000; \$9,750; \$9,500.

Section 28.

Part 28b - Review Assignment 28b.

Exercise 2 (for Part 28b),

and Exercises 1-2 (for Review Assignment 28b).

2-3. a. $\$11,314 @ 6\% = \678.84 ; $\$678.84 \div 2 = \339.42 .

b. $\$21,745 @ 6\frac{1}{2}\% = \$1,413.43$; $\$1,413.43 \div 2 = \706.72 .

c. $\$7,179 @ 7\% = \502.53 ; $\$502.53 \div 2 = \251.27 .

d. $\$9,760 @ 7\frac{1}{2}\% = \732.00 ; $\$732.00 \div 2 = \361.00 .

e. $\$19,156 @ 8\% = \$1,532.48$; $\$1,532.48 \div 2 = \766.24 .

f. $\$15,330 @ 8\frac{1}{2}\% = \$1,303.05$; $\$1,303.05 \div 2 = \651.53 .

2-4. a. $\$15,255 @ 6\% = \915.30 ; $\$915.30 \div 4 = \228.83 .

b. $\$11,220 @ 8\frac{1}{2}\% = \953.70 ; $\$953.70 \div 4 = \238.43 .

c. $\$26,914 @ 7\% = \$1,883.98$; $\$1,883.98 \div 4 = \471.00 .

d. $\$11,233 @ 9\% = \$1,010.97$; $\$1,010.97 \div 4 = \252.74 .

e. $\$21,110 @ 7\frac{1}{2}\% = \$1,583.25$; $\$1,583.25 \div 4 = \395.81 .

f. $\$3,114 @ 8\% = \249.12 ; $\$249.12 \div 4 = \62.28 .

2-5. $\$7,000 \times 8\% = \560 ; $\$560 \div 4 = \140 .

$\$140 + \$200 = \$340$; $\$336$; $\$332$; $\$328$.

2-6. $\$10,000 \times 7\% = \700 ; $\$700 \div 4 = \175 .

$\$175 + \$300 = \$475$; $\$469.75$; $\$464.50$.

2-7. $\$8,000 \times 9\% = \720 ; $\$720 \div 12 = \60 .

$\$60 + \$80 = \$140$; $\$139.40$; $\$138.80$.

a. $60\% \text{ of } \$82.40 = \49.44 .

b. $4\frac{1}{4}\% \text{ of } \$360 = \$15.30$.

c. $2\frac{3}{4}\% = .0275$.

d. $125\% = 1.25$.

e. April 3 to June 18: 76 days.

f. $\$1,680 \times 5\frac{1}{2}\% (\$92.40) \text{ for } 2\frac{1}{2} \text{ years} = \231.00 .

Unit 7.

Section 28.

Review Assignment 28b.

Exercises 2-9.

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Review Assignment
Unit 28b

2. 8% of $\$2,400 = \192 ; March 22 to May 27: 66 days;
 $360 \div 66 = 5.45$; $\$192 \div 5.45 = \35.23 ;
 $\$2,400 + \$35.23 = \$2,435.23$.

3. a. $\$500 \times 9\% = \45 ; $360 \div 60 = 6$; $\$45 \div 6 = \7.50 ;
 $\$500.00 - \$7.50 = \$492.50$.

b. Due date on 60-day note dated May 19: July 18.

4. a. Due date on 80-day note dated May 1: July 20.

b. $\$1,000 \times 7\% = \70 ; $360 \div 80 = 4.5$;
 $\$70 \div 4.5 = \15.56 ; $\$1,000 + \$15.56 = \$1,015.56$.

5. 60% of $\$375 = \225 ;
 40% of $\$375 = \150 ;
 $\$225 + \$150 = \$375$.

6.	$\begin{array}{r} 8 \\ 7 \\ 9\frac{1}{2} \\ 10\frac{1}{2} \\ +10 \\ \hline 45 \end{array}$	$\begin{array}{r} \$7.60 \\ \times 39 \\ \hline 6840 \\ 2280 \\ \hline \$296.40 \end{array}$	$\begin{array}{r} \$7.60 \\ \times 15 \\ \hline 3800 \\ 760 \\ \hline \$114.00 \end{array}$	$\begin{array}{r} \$11.40 \\ \times 6 \\ \hline 68.40 \end{array}$	$\begin{array}{r} \$296.40 \\ - 68.40 \\ \hline \$228.00 \end{array}$
----	--	--	---	--	---

7. $300 \text{ mL} = .3 \text{ L}$; $400 \text{ mL} = .4 \text{ L}$.

$\$1.17 \div .3 = \3.90 ; b. $\$1.44 \div .4 = \3.60

a. A carton of cans. b. $\$3.90 - \$3.60 = \$.30$.

8. a. $\$48.94$ decreased by $7\frac{1}{2}\%$ of itself gives $\$52.91$.

b. $\$186$ is $\frac{3}{4}$ of $\$124$.

c. $3.275 = 3\frac{275}{1000} = 3\frac{11}{40}$

9. $\$3,120 \div 6\% = \$52,000$.

Section 29.

Exercises 11-2.

Unit 7.

Section 29.

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11-1. a.

End of:	Unpaid Balance	Finance Charge: 1% of Unpaid Balance	Payment on Principal	Total Payment
1st month	\$ 100	\$ 1.00	\$ 25.00	\$ 26.00
2nd month	75	.75	25.00	25.75
3rd month	50	.50	25.00	25.50
4th month	25	.25	25.00	25.25
Total		\$ 2.50	\$ 100.00	\$ 102.50

b.

End of:	Unpaid Balance	Finance Charge: 1% of Unpaid Balance	Payment on Principal	Total Payment
1st month	\$ 150	\$ 1.50	\$ 30.00	\$ 31.50
2nd month	120	1.20	30.00	31.20
3rd month	90	.90	30.00	30.90
4th month	60	.60	30.00	30.60
5th month	30	.30	30.00	30.30
Total		\$ 4.50	\$ 150.00	\$ 154.50

c.

End of:	Unpaid Balance	Finance Charge: $\frac{3}{4}\%$ of Unpaid Balance	Payment on Principal	Total Payment
1st month	\$ 240	\$ 1.80	\$ 40.00	\$ 41.80
2nd month	200	1.50	40.00	41.50
3rd month	160	1.20	40.00	41.20
4th month	120	.90	40.00	40.90
5th month	80	.60	40.00	40.60
6th month	40	.30	40.00	40.30
Total		\$ 6.30	\$ 240.00	\$ 246.30

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is what?
(continued)

d.

End of:	Unpaid Balance	Finance Charge $\frac{1}{2}\%$ on Unpaid Balance	Payment on Principal	Finance Charge on Unpaid Balance
1st month	\$ 400	\$ 2.00	\$ 80.00	\$ 82.00
2nd month	320	1.60	80.00	81.60
3rd month	240	1.20	80.00	81.20
4th month	160	.80	80.00	80.80
5th month	80	.40	80.00	80.40
5th c.		\$ 6.00	\$ 400.00	\$ 406.00

e.

End of:	Unpaid Balance	Finance Charge $\frac{3}{4}\%$ on Unpaid Balance	Payment on Principal	Finance Charge on Unpaid Balance
1st month	\$ 350	\$ 2.63	\$ 50.00	\$ 52.63
2nd month	300	2.25	50.00	52.25
3rd month	250	1.88	50.00	52.00
4th month	200	1.50	50.00	51.60
5th month	150	1.13	50.00	51.20
6th month	100	.75	50.00	50.80
7th month	50	.38	50.00	50.40
Total		\$ 11.20	\$ 350.00	\$ 361.20

1-2.

End of:	Unpaid Balance	Finance Charge $1\frac{1}{2}\%$ on Unpaid Balance	Payment on Principal	Finance Charge on Unpaid Balance
1st month	\$ 175	\$ 2.63	\$ 35.00	\$ 36.75
2nd month	140	2.10	35.00	36.40
3rd month	105	1.58	35.00	36.05
4th month	70	1.05	35.00	35.70
5th month	35	.53	35.00	35.35
Total		\$ 5.25	\$ 175.00	\$ 180.25

(a.) (b.)

Section 29.
Exercises 1-2.

Unit 7.

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1-3.

End of:	Unpaid Balance	Finance Charge: $\frac{4}{3}\%$ of Unpaid Balance	Payment or Principal	Finance Charge on Unpaid Balance
1st month	\$360	\$ 2.88	\$ 60.00	\$ 62.88
2nd month	300	2.40	60.00	62.40
3rd month	240	1.92	60.00	61.92
4th month	180	1.44	60.00	61.44
5th month	120	.96	60.00	60.96
6th month	60	.48	60.00	60.48
Total		\$10.08	\$360.00	\$370.08

2-1.

	Amount of Loan	Monthly Payments Number	Amount	Total Paid	Finance Charge
a.	\$800	24	\$40.27	\$966.48	\$166.48
b.	100	6	18.20	109.20	9.20
c.	300	12	28.65	343.80	43.80
d.	400	18	26.95	485.10	85.10
e.	500	24	25.90	621.60	121.60

2-2.

$$\begin{array}{r}
 \overset{284}{\$42.95} \quad \$386.55 \\
 \times \quad 9 \quad -350.00 \\
 \hline
 \$386.55 \quad \$36.55
 \end{array}$$

2-3.

$$\begin{array}{r}
 \overset{111}{\$35.88} \quad \$861.12 \\
 \times \quad 24 \quad -700.00 \\
 \hline
 14'3'52 \quad \$161.12 \\
 7176 \\
 \hline
 \$861.12
 \end{array}$$

Unit 7.

Section 29 - Review Assignment 29.

Exercises 2 (for Section 29),

and Exercises 1-4 (for Review Assignment 29).

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Exercise 2
Section 29

$$\begin{array}{r}
 \text{2-4. } \$45.33 \\
 \times \quad 12 \\
 \hline
 \$543.96
 \end{array}
 \quad
 \begin{array}{r}
 \$543.96 \\
 - 500.00 \\
 \hline
 \$43.96
 \end{array}$$

$$\begin{array}{r}
 \text{2-5. a. } \$67.90 \\
 \times \quad 12 \\
 \hline
 \$814.80
 \end{array}
 \quad
 \begin{array}{r}
 b. \$814.80 \\
 - 750.00 \\
 \hline
 \$64.80
 \end{array}$$

$$\begin{array}{r}
 \text{2-5. a. } \$41.80 \\
 \times \quad 6 \\
 \hline
 \$250.80
 \end{array}
 \quad
 \begin{array}{r}
 b. \$250.80 \\
 - 240.00 \\
 \hline
 \$10.80
 \end{array}$$

Review Assignment
Section 29

- amount financed (b) The sum of the borrower's costs, financing (f) Interest and other charges paid.
 installment: (a) A small part payment on a loan.
 installment or consumer loan: (c) A loan repaid in part payments.
 level payment plan: (b) All payments the same amount.
 mortgage: (c) Security for repayment of a loan.

- 135% of \$95 is \$128.25.
 - \$2.35 is $12\frac{1}{2}\%$ of \$18.80.
 - $95\frac{1}{2}\% = .955$.
 - August 24 to November 6: 74 days.

$$\begin{array}{r}
 \text{3. } \$36.20 \\
 \times \quad 6 \\
 \hline
 \$217.20
 \end{array}
 \quad
 \begin{array}{r}
 \$217.20 \\
 - 200.00 \\
 \hline
 \$17.20
 \end{array}$$

$$\begin{array}{l}
 \text{4. } \$154,000 + 18\% \text{ of } \$1,540 = \\
 \$27,720 + \$154,000 = \$181,720.
 \end{array}$$

Sections 29-30.

Review Assignment 29-Section 30.

Exercises 5-9 (for Review Assignment 29),
and Exercises 1-2 (for Section 30).

$$\begin{aligned}
 5. \quad & \$15,000 + 10\% \text{ of } \$15,000 = \\
 & \$15,000 + \$1,500 = \$16,500; \\
 & \$16,500 + \$1,500 = \$18,000; \\
 & \$18,000 + \$1,500 = \$19,500.
 \end{aligned}$$

$$\begin{array}{r}
 6. \quad \begin{array}{r} 7\frac{1}{2} \quad 37\frac{1}{2} \\ \times 55 \quad - \quad 2\frac{1}{2} \\ \hline 37\frac{1}{2} \quad 35 \end{array} \quad \begin{array}{r} \frac{1}{2} \quad \frac{1}{2} \\ \$6.65 \\ \times \quad 35 \\ \hline 133.25 \\ 1995 \\ \hline \$232.75 \end{array}
 \end{array}$$

$$7. \quad \$65.34 \text{ is } 35\% \text{ more than } \$48.40.$$

$$8. \quad \$450.00 \div 8\% = \$5,625$$

$$9. \quad \$2,345.00 \div 7\% = \$33,500.$$

Section 30.

	Face of Loan	Finance Charge Yearly Rate	Terms of Payment
-1.	\$300	9%	12 equal monthly payments = \$27.00
-2.	420	9%	12 equal monthly payments = \$37.80
-3.	400	9%	10 equal monthly payments = \$30.00
-4.	500	9%	8 equal monthly payments = \$30.00

$$5. \quad a. \quad 9\% \text{ of } \$600 = \$54;$$

$$\$54 + \$600 = \$654.$$

$$b. \quad \$654 \div 12 = \$54.50$$

$$2-1. \quad a. \quad \$1,620 \div 18 = \$90;$$

$$\$1,620 \times 8\% = \$129.60; \$129.60 \times 1.5 = \$194.40;$$

$$\$194.40 + \$5.60 = \$200.00.$$

$$b. \quad \$1,620 - \$200 = \$1,420.$$

Unit 7. Section 30.
Exercises 2-4.

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(continued).

- 3-2. a. $\$300 \div 12 = \25 $\$300 \times 25 = \7500
 $\$30.00 + \$3.00 = \$33.00$
 b. $\$300.00 - \$33.00 = \$267.00$
 c. $\$300.00 \div 12 = \25.00

3-1.	Amount Financed	Finance Charge	Divided By	Finance Charge Per \$100
a.	\$300	\$5.10	3	\$21.70
b.	400	12.75	4	32.44
c.	500	113.62	5	22.72
d.	680	44.20	6 1/2	6.50
e.	250	81.50	2 5/10	32.61
f.	930	70.20	9 3/10	7.53

- 3-2. a. $\$32.70 \times 30 = \981.00
 b. $\$750.00 + \$981.00 = \$1,731.00$
 c. $\$1,731.00 \div 100 = \17.31

- 3-3. $\$400 \times 9\frac{1}{2}\% = \38 ; $\$400 \div 12 = \33.33
 a. $\$38.00 + \$33.33 = \$71.33$
 b. $\$400.00 + \$71.33 = \$471.33$
 c. $\$471.33 \div 100 = \4.71

	No. of Payments	Finance Charge Per \$100	Annual Percentage Rate
4-1. a.	6	\$3.62	12 1/4%
b.	6	3.65	12 1/2%
c.	12	6.30	11 1/2%
d.	18	10.50	12 3/4%
e.	24	12.90	12%

Section 30 - Review Assignment 30.
 Exercise 4 (for Section 30),
 and Exercises 1-2 (for Review Assignment 30).

Unit 7.

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	No. of Payments	Finance Charge Per \$100	Annual Percentage Rate.
f.	12	\$14.27	25 $\frac{1}{2}$ %,
g.	18	20.65	24 $\frac{3}{4}$ %,
h.	24	29.15	26%,
i.	18	22.61	27%,
j.	30	36.00	25 $\frac{1}{4}$ %.

4-2. a. $\$26.75 \times 12 = \321.00 ;
 $\$321.00 - \$300.00 = \$21.00$.
 b. $\frac{\$21.00 \times 100}{\$300} = \frac{\$2,100}{\$300} = \$7.00$.
 c. $\$7.00 = 12 \frac{3}{4}\%$.

4-3. a. $\$17.00 \times 18 = \306.00 ;
 $\$306.00 - \$250.00 = \$56.00$.
 b. $\frac{\$56.00 \times 100}{\$250} = \frac{\$5,600}{\$250} = \$22.40$.
 c. $\$22.40 = 26 \frac{3}{4}\%$.

4-4. $\$22.60 \times 30 = \678.00 ;
 $\$678.00 - \$500 = \$178.00$.
 $\frac{\$178.00 \times 100}{\$500} = \frac{\$17,800}{\$500} = \$35.60$.
 $\$35.60 = 25\%$.

1. a. $\$82.80$ is 115% of $\$72.00$.
 b. $16 \frac{2}{3}\%$ of $\$32.70 = \5.45
 c. $94 \frac{1}{4}\% = .9425$.
 d. $\$705 \times 9\% (\$63.45)$ for 20 days = $\$5.29$.
 e. $62 \frac{1}{2}\%$ of 420 kg = 262.5 kg.

2. $\$16.15 \times 24 = \387.60 ;
 $\$387.60 - \$300.00 = \$87.60$.
 $\frac{\$87.60 \times 100}{\$300} = \frac{\$8,760}{\$300} = \$29.20$.
 $\$29.20 = 26\%$.

Unit 7.

Section 30.

Review Assignment # 30.

Exercises 3-9.

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Review Assignment # 30 (Continued).

3. a. $\frac{\$24.52 \times 100}{\$350} = \frac{\$2,452}{\$350} = \$7.01$
 b. $\$7.01$ for 12 monthly pay = $12\frac{3}{4}\%$

4. a. Due date on 90-day note dated Aug. 30: Nov. 28!*

b. $\$638 \times 7\% = \44.66 ; $360 \div 90 = 4$;
 $\$44.66 \div 90 = \11.17 ; $\$638.00 + \$11.17 = \$649.17$
 (Don't expect Tanager to pay that much money!)

5. $\$450 \div 12 = \37.50 ; $\$450 \times 6\% = \27.00 ;
 $\$37.50 + \$27.00 = \$64.50$; $\$64.50 \div 12 = \5.38

6. 6% of $\$35,650 = \$2,139.00$;
 $\$2,139.00 + \$243.75 = \$2,382.75$;
 $\$35,650.00 - \$2,382.75 = \$33,267.25$

7. April 22 to July 6 = 75 days.
 $\$576 \times 10\% = \57.60 ; $360 \div 75 = 4.8$;
 $\$57.60 \div 4.8 = \12.00 ; $\$576 + \$12 = \$588$.

8. $50\text{ m} \div 0.3\text{ m} = 1,67\text{ ft.}$

9. Checkbook balance:	\$ 816.52
Less:	
Amount of check not recorded	\$ 15.35
Deposit entered twice in checkbook	20.00
Amount of check (too small)	18.00
Sub-total:	\$ 763.17
Add: Deposit not recorded	35.00
Correct checkbook balance:	\$ 798.17

*"We know, Marty! That's when Tanager took off her shoes!" -Dana

Section 31.
Exercises 1-2.

Unit 7.

Section 31.

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	Article	Cash Price	Installment Terms
1-1.	Color TV	\$400	\$60 down; \$31 a month for 12 months a. \$432 b. \$32 c. 8%
1-2.	Mini-Bike	175	\$20 down; \$11 a month for 16 months a. \$196 b. \$21 c. 12%
1-3.	Power Saw	80	\$15 down; \$3 a week for 24 weeks a. \$87 b. \$7 c. 8%
1-4.	Dryer	250	\$35 down; \$13.75 a month for 18 months a. \$282.50 b. \$32.50 c. 13%
1-5.	Power Mower	160	\$20 down; \$9.75 a month for 16 months a. \$176 b. \$16.00 c. 10%
1-6.	Typewriter	200	\$25 down; \$10.10 a month for 20 months a. \$227 b. \$27.00 c. 13½%

	Article	Installment Price	Installment Terms
a.	Sailboat	\$320	\$50 down; \$18 a month for 15 months
b.	Jewelry	150	\$25 down; \$2.50 a week for 50 weeks
c.	Recorder	70	\$10 down; \$7.50 a month for 8 months
d.	Camera	50	\$5 down; \$3.00 a week for 15 weeks

2-2. $\$14.37 \times 12 = \$172.44;$
 $\$172.44 + \$18.00 = \$190.44.$

2-3. $\$2.75 \times 14 = \$38.50;$
 $\$38.50 + \$5.50 = \$44.00;$
 $\$38.50 \div \$44.00 = 8\frac{3}{4}\%.$

2-4. $\$225 - \$45 = \$180;$
 $\$180 \div \$7.50 = 24 \text{ months.}$

Unit 7

Section 31 - Review Assignment 31.

Exercises 2-3 (for Section 31),

and Exercises 1-2 (for Review Assignment 31).

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Exercise 2
(continued)

$$2-5. \quad \$95 - \$15 = \$80;$$

$$\$80 \div 16 = \$5.00.$$

$$2-6. \quad \$85 - \$10 = \$75;$$

$$\$75 \div 12 = \$6.25.$$

$$3-1. \quad a. \quad \$18.20 \times 12 = \$218.40;$$

Chair $\$225.00 - \$25.00 = \$200.00;$

$$\$218.40 - \$200.00 = \$18.40;$$

$$\frac{\$18.40 \times 100}{\$200} = \frac{\$1,840}{\$200} = \$9.20 = 16\frac{1}{2}\%$$

b. $\$11.00 \times 12 = \$132.00;$

Text $\$150.00 - \$30.00 = \$120.00;$

$$\$132.00 - \$120.00 = \$12.00;$$

$$\frac{\$12.00 \times 100}{\$120} = \frac{\$1,200}{\$120} = \$10.00 = 18\%.$$

c. $\$17.70 \times 24 = \$424.80;$

Printer $\$400.00 - \$40.00 = \$360.00;$

$$\$424.80 - \$360.00 = \$64.80;$$

$$\frac{\$64.80 \times 100}{\$360} = \frac{\$6,480}{\$360} = \$18.00 = 16\frac{1}{2}\%.$$

d. $\$5.75 \times 18 = \$103.50;$

Book $\$103.50 - \$90.00 = \$13.50;$

$$\frac{\$13.50 \times 100}{\$90} = \frac{\$1,350}{\$90} = \$15.00 = 18\frac{1}{4}\%.$$

e. $\$7.35 \times 24 = \$176.40;$

Cost $\$176.40 - \$150.00 = \$26.40;$

$$\frac{\$26.40 \times 100}{\$150} = \frac{\$2,640}{\$150} = \$17.60 = 16\%.$$

$$3-2. \quad \$22.20 \times 30 = \$666.00;$$

$$\$666.00 - \$540.00 = \$126.00;$$

$$\frac{\$126.00 \times 100}{\$540} = \frac{\$12,600}{\$540} = \$23.33 = 17\%.$$

$$3-3. \quad \$5.05 \times 18 = \$90.90;$$

$$\$95.00 - \$15.00 = \$80.00;$$

$$\$90.90 - \$80.00 = \$10.90;$$

$$\frac{\$10.90 \times 100}{\$80} = \frac{\$1,090}{\$80} = \$13.63 = 16\frac{1}{2}\%.$$

Section 31- Review Assignment 31.

Unit 7.

Exercise 3 (for Section 31),

and Exercises 1-6 (for Review Assignment 31).

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3-4. $\$11.90 \times 30 = \$357.00;$

$\$340.00 - \$50.00 = \$290.00;$

$\$357.00 - \$290.00 = \$67.00;$

$\frac{\$67.00 \times 100}{\$290} = \frac{\$6,700}{\$290} = \$23.10 = 16\frac{3}{4}\%.$

1. annual percentage rate: (d) Ratio of finance charges to amount financed.

down payment: (c) Part of price paid at time of buying.

installment plan: (a) Another name for time payment plan.

service charge: (b) A charge in addition to interest.

2. a. $105\frac{1}{2}\% = 1.055.$

b. $\$2.45$ is $16\frac{2}{3}\%$ greater than $\$2.10.$

c. $\$71.50$ is $62\frac{1}{2}\%$ greater than $\$44.00.$

d. $\$800 \times 7\frac{1}{2}\% (\$60) \text{ for } 120 \text{ days} = \$20.00.$

3. $\$9.80 \times 12 = \$117.60;$

$\$120.00 - \$12.00 = \$108.00;$

$\$117.60 - \$108.00 = \$9.60;$

$\frac{\$9.60 \times 100}{\$108} = \frac{\$960}{\$108} = \$8.89 = 16\%.$

4. $\$395.00 - \$45.00 = \$350.00;$

$\$350.00 \div \$25.00 = 14.$

5. $\$415.00 - \$37.50 = \$377.50;$

$\$377.50 \div 12 = \$31.46.$

6. $\$19.15 \times 20 = \$383.00;$

$\$383.00 - \$350.00 = \$33.00.$

Unit 7.

Section 31.

Review Assignment 31-2 General Review:

Exercise 7 (for Review Assignment 31),

and Exercises 1-2 (for General Review).

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Review Assignment 31 (cont.)

7. $\$340.20 - \$300.00 = \$40.20$;

$\$340.20 \div 18 = \18.90 ;

$\$40.20 \div 3 = \$13.40 = 16\frac{1}{4}\%$.

General Review

1. a. $8\frac{1}{2} = 8\frac{6}{12}$

$3\frac{5}{6} = 3\frac{10}{12}$

$11\frac{1}{3} = 11\frac{4}{12}$

$+15\frac{3}{4} = +15\frac{9}{12}$

$37\frac{29}{12} = 38\frac{7}{12}$

b. $52\frac{1}{2} = 52\frac{4}{8}$

$-22\frac{5}{8} = -22\frac{5}{8}$

$29\frac{7}{8}$

c. $12\frac{1}{4} \times 8\frac{1}{2}$

$= \frac{49}{4} \times \frac{25}{3} = \frac{1225}{12} = 102\frac{1}{12}$

d. $32\frac{1}{2} \div 6\frac{1}{2}$

$= \frac{65}{2} \times \frac{2}{13} = 5$

e. 804.25

7.2

5608.50

5624.75

5710.600

f. $73.4 \sqrt{80.006}$

734

6606

6606

2.

Jim Borden
Reconciliation Statement
October 31, 1980

Checkbook balance: \$339.11	Bank statement balance: \$394.62
Less:	Less outstanding checks:
Service charge 1.74	#277 \$41.32
	#278 3.18
	#279 12.75
Correct checkbook balance \$337.37	Available bank balance: \$337.37

Section 31.
General Review.
Exercises 3-9.

Unit 7.

195

$$\begin{array}{r}
 \begin{array}{r}
 \text{3. } \$74,772 \\
 + 19,665 \\
 \hline
 \$94,437 \\
 - 31,665 \\
 \hline
 \$62,772
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{r}
 \text{4. } \$292 \\
 306 \\
 288 \\
 + 302 \\
 \hline
 \$1,188
 \end{array}
 \end{array}$$

The sales agent must
get \$287 to average
\$295.

$$\begin{array}{r}
 \text{5. Peanuts: } 27 \text{ pounds } (9 \times 3 = 27) \\
 \text{Cashews: } 18 \text{ pounds } (9 \times 2 = 18) \\
 (27 + 18 = 45)
 \end{array}$$

$$\begin{array}{r}
 \text{6. } 40\% \text{ of } \$344 = \$137.60; \\
 75\% \text{ of } \$344 = \$258.00; \\
 \$137.60 + \$258.00 = \$395.60.
 \end{array}$$

$$\begin{array}{r}
 \text{7. } \$360.00 \times 6\% = \$21.60; \\
 \$360.00 + \$21.60 = \$381.60; \\
 \$381.60 \div 9 = \$42.40.
 \end{array}$$

$$\begin{array}{r}
 \text{8. } 2,400 (1,800 + 300 = 2,100; \\
 2,100 + 300 = 2,400).
 \end{array}$$

$$\begin{array}{r}
 \text{9. } 30 \times 12 = 360; \$5.25 \times 12 = \$63.00; \\
 \$63.00 \div \$900.00 = 7\%.
 \end{array}$$

Unit 7.

Section 31.

General Review

Exercises 10-12.

196

General Review
(continued)

10. a. $\$900 \times 9\% (\$9.00) \text{ for } 80 \text{ days} = \$2.00;$
 $\$900.00 + \$2.00 = \$902.00.$

b. Due date on 90-day note dated Nov. 8: Feb. 6.

11. June 15 to August 29: 75 days.

$$360 \div 75 = 8; \$1,200 \times 8\% = \$96;$$

$$\$96 \div 8 = \$12; \$1,200.00 + \$12.00 = \$1,212.00.$$

12.	8	$\overset{\frac{2}{8}}{\$5.70}$	$\overset{3}{\$5.70}$	$\overset{2}{\$8.55}$
	6	$\times \quad 38$	$\times \quad 15$	$\times \quad 5$
	8	4560	2850	\$42.75
	9	1710	570	+216.60
	+10	\$21660	\$8,550	\$259.35
	43			

$$\begin{array}{r} \overset{3}{\$259.35} \\ \times \overset{2}{.0613} \\ \hline 177805 \\ 25935 \\ 155610 \\ \hline \end{array}$$

\$15,898.155

$$\begin{array}{r} \overset{12}{\$15.90} \\ 41.90 \\ +13.60 \\ \hline \$71.40 \end{array}$$

$$\begin{array}{r} \overset{1158.13}{\$259.35} \\ - 71.40 \\ \hline \$187.95 \end{array}$$

Section 31.

General Review:

Exercises 13-16.

Unit 7.

197

13. Tanalee Carver	
Reconciliation Statement	
July 31, 1981	
Checkbook balance: \$329.63	Bank statement balance: \$384.11
Less:	Less outstanding checks:
Service charge 1.42	#45 \$13.27
Sub-total: \$328.21	#46 29.41
Add:	#47 8.22 50.90
Amount on check (too large) 5.00	
Correct checkbook balance: \$333.21	Available bank balance: \$333.21

14. $\$31,000 - \$20,000 = \$11,000;$
 $\$1,000 + \$11,000 + \$1,825 = \$13,825.$
 $\$1,825 \div \$11,000 = 7\frac{1}{2}\%.$

15. $\$21,000 \div 6\% = \$350,000.$

16. $\$250 - \$200 = \$50;$
 $\$200 \div 4\% = \$5,000.$
 $\$5,000 + \$200 = \$5,200.$

Unit 8.

Section 32.

Part 32a.

Exercises 1-2.

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Unit 8, Section 32.

1-1.

Riverside Savings Bank No. 776351				
In Account with Martin B. [unclear]				
Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$400.00		\$ 400.00
Apr. 1			\$ 5.00	405.00
Apr. 1		100.00		505.00
July 1			6.31	511.31
July 1	\$50.00			461.31

1-2.

Riverside Savings Bank No. 776352				
In Account with Martin B. [unclear]				
Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$500.00		\$ 500.00
Apr. 3		10.00		600.00
May 8	\$150.00			450.00
Sept. 1			\$ 12.38	462.38
Aug. 5	175.00			287.38

1-3.

Riverside Savings Bank No. 776353				
In Account with Martin B. [unclear]				
Date	Withdrawal	Deposit	Interest	Balance
1981 June 30				\$ 563.26
July 1			\$ 7.74	571.00
Aug. 7	\$370.00			201.00
Oct. 1			2.26	203.26
Nov. 20	35.00			168.26
Dec. 12		\$ 85.20		253.46

- 2-1. a. $\$376.85$ at 5% a year = $\$18.80 \div 4 = \4.70
 b. $\$648.98$ at 5% a year = $\$32.40 \div 4 = \8.10
 c. $\$842.00$ at 6% a year = $\$50.52 \div 4 = \12.63

Section 32.
Part 32a.
Exercises 2-3.

Unit 8

199

- d. \$755.42 at 5% a year = $\$37.75 \div 4 = \9.44
 e. \$506.95 at 7% a year = $\$35.42 \div 4 = \8.86
 f. \$864.88 at 6% a year = $\$51.84 \div 4 = \12.96

- 2-2. a. \$844.50 at 5% a year = $\$42.20 \div 2 = \21.10
 b. \$684.70 at 6% a year = $\$41.04 \div 2 = \20.52
 c. \$528.80 at 5% a year = $\$26.40 \div 2 = \13.20
 d. \$415.96 at 5% a year = $\$20.75 \div 2 = \10.38
 e. \$705.35 at 7% a year = $\$49.35 \div 2 = \24.68
 f. \$342.15 at 6% a year = $\$20.52 \div 2 = \10.26

3-1. In Account with Martin Hagg

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$600.00		\$ 600.00
Apr. 1			\$ 9.00	609.00
July 1			9.14	618.14
Oct. 1			9.27	627.41
1982 Jan. 2			9.41	636.82
6% interest a year			\$36.82	

3-3. In Account with Mary Williams

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$900.00	\$ 13.50	\$ 913.50
April 1			13.70	927.20
July 1			13.91	941.11
Oct. 1			14.12	955.23
6% interest a year			\$ 55.23	

Unit 8.

Section 32.

Part 32a.

Exercises 3-4.

200

Exercise 3
(continued)

3-4.

In Account with P. H. Swenson				
Date	Withdraw	Deposit	Interest	Balance
1921 Jan. 2		\$ 820.00	\$ 10.25	\$ 830.25
Apr. 1			10.38	840.63
July 1			10.51	851.14
Oct. 1			10.64	861.78
5% interest a year			\$ 41.78	

3-5.

In Account with J. W. Noble				
Date	Withdraw	Deposit	Interest	Balance
1921 Jan. 2		\$ 3,000.00	\$ 45.00	\$ 3,045.00
Apr. 1			45.68	3,090.68
July 1			46.36	3,137.04
Oct. 1			47.05	3,184.09
6% interest a year			\$ 164.10	

3-6.

In Account with Cady Lyons				
Date	Withdraw	Deposit	Interest	Balance
1921 Jan. 2		\$ 400.00	\$ 10.00	\$ 410.00
July 1			10.25	420.25
5% interest a year			\$ 20.25	

4-1.

In Account with Janet Morrison				
Date	Withdraw	Deposit	Interest	Balance
1921 Jan. 2				\$ 0.00
Apr. 1		\$ 200.00	\$ 3.00	203.00
July 1		156.00	5.39	364.39
Oct. 1				364.39
6% interest a year				

Section 32.
Part 32a.
Exercises 4-5.

Unit 8.

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4-2. In Account with John Osborne

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1				0.00
July 1		\$ 500.00	\$ 6.25	506.25
Oct. 1		300.00	10.08	816.33

5% interest a year

4-3. In Account with Vera Anderson

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$ 800.00	\$ 10.00	810.00
July 1	\$ 170.00		8.00	648.00
Oct. 1				648.00

5% interest a year

5-1. Highland Bank
In Account with Via Melles

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$ 482.73	\$ 7.24	482.73
May 11	\$ 150.00			332.73
June 2		200.00		532.73
July 1			\$ 4.99	537.72
Oct. 1				

6% interest a year

Unit 8.

Section 32.

Part 32a - Review Assignment 32a.

Exercise 5 (for Part 32a),

and Exercise 1 (for Review Assignment 32a).

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Exercise 5
(continued).

5-2.

New Jersey Savings Bank				
In Account with Anita Poza				
Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$ 900.00	\$ 11.25	911.25
May 1	\$ 300.00			611.25
May 9	140.00			471.25
July 1			5.89	477.14
Oct. 1				

5% interest a year

5-3.

York Bank				
In Account with Russ Kravac				
Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$ 654.00		654.00
May 20		125.00		769.00
June 19		200.00		969.00
July 1			\$ 16.96	985.96
July 12	\$ 300.00			685.96
Oct. 1			12.00	697.96

7% interest a year

Review Assignment 32a

1. a. \$42 is $71\frac{4}{7}\%$ less than \$112.
- b. \$327.50 is $66\frac{2}{3}\%$ greater than \$196.50.
- c. $112\frac{1}{4}\% = 1.1225$
- d. $\$815 \times 7\%$ (\$57.05) for 30 days = \$47.54

Section 32.
Review Assignment 32a,
Exercises 2-7.

Unit 8.

203

2. In Account with Cody Wall

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$450.00		\$ 450.00
Apr. 1			\$ 6.75	456.75
July 1			6.85	463.60

6% interest a year

3. $\$4,800 - \$1,900 = \$2,900$;
 $\$700 \div 30 = \23.33 ,

4. $\$26.75 \times 12 = \321.00 ;
 $\$321.00 - \$280.00 = \$41.00$;
 $\frac{\$41.00 \times 100}{\$280} = \frac{\$4100}{\$280} = \$14.64 = 26\%$.

5. a. 1.8 kilograms = 1800 grams;
 $1800g \div 10 = 180g$.
 b. $\$11.25 \div 10 = \1.13 .
 c. $\$11.25 \div 1.8 = \6.25 .

6. a. $\$67.50$ is 10% of $\$675.00$.
 b. $2.5\% = 2\frac{1}{2}$.

7. In Account with Quincy Devon

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$520.00	\$ 6.50	526.50
Jul. 1		185.00	8.89	535.39
Oct. 1			6.69	542.08

5% interest a year

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	Principal	Rate	Time	Compounded	Compound Amount	Compound Interest
6-1.	\$1,000	5%	10 years	Annually	\$1,628.90	\$ 628.90
6-2.	500	4%	6 years	Annually	632.66	132.66
6-3.	900	8%	12 years	Annually	2,266.35	1,366.35
6-4.	1,200	6%	5 years	Annually	1,605.87	405.87

	Principal	Rate	Time	Compounded	Compound Amount	Compound Interest
7-1.	\$1,000	5%	3 years	Quarterly	\$ 1,160.76	\$ 160.76
7-2.	800	8%	2 years	Quarterly	937.32	137.32
7-3.	3,500	5%	2 1/2 years	Quarterly	3,962.95	462.95
7-4.	600	8%	3 years	Semiannually	759.19	159.19

Review Assignment 32b

1. (a) The total in a savings account at the end of last period.
 (b) The difference between original principal and compound amount.
 (c) The difference between original principal and compound interest.
 (d) Figuring and adding interest to make a new principal.
 (e) A record of a savings account.

2. a. \$8.42 is $33\frac{1}{3}\%$ of \$25.26.
 b. $1\frac{1}{2}\%$ of \$1,360 equals \$20.40.
 c. \$240 is $16\frac{2}{3}\%$ less than \$288.
 d. \$29.40 increased by 25% = \$36.75.
 e. \$2.25 is 25% greater than \$1.80.

3. West End Savings Bank
In Account with Barbara Silberg

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2				\$ 0.00
Apr. 1		\$ 300.00	\$ 3.75	300.00
July 1			\$ 3.75	303.75
Oct. 1			3.80	307.55

5% interest a year

4. $10\% \text{ of } \$540 = \$54;$
 $\$540 + \$54 = \$594;$
 $\$594 \div 18 = \$33.$

5. a. $\$10,500 - \$6,000 = \$4,500;$
 $5\% \text{ of } \$4,500 = \$225.$

b. $\$10,500 - \$9,000 = \$1,500;$
 $2\% \text{ of } \$1,500 = \$30.$

c. $\$800 + \$1,500 + \$30 = \$2,330.$

6. $6\% \text{ of } \$28,500 = \$1,710;$
 $\$1,710.00 + \$69.25 = \$1,779.25;$
 $\$28,500.00 - \$1,779.25 = \$26,720.75.$

7. $\$55.00 \times 24 = \$1,320;$
 $\$1,320 - \$1,100 = \$220;$
 $\frac{\$220 \times 100}{\$1,100} = \frac{\$22,000}{\$1,100} = \$20.00;$
 $\$20.00 = 18\frac{1}{4}\%.$

8. a. $\$23.22 \text{ is } 35\% \text{ more than } \17.20
 b. $0.8\% = \frac{8}{1,000} = \frac{1}{125}$

Unit 8.

Sections 32-33.

Review Assignment 32b - Part 33a.

Exercises 9-10 (for Review Assignment 32b),
and Exercises 1 (for Part 33a).

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Review Assignment
32b (Continued)

Put out of
Fantasy
Land,
Marty!

9. Quebec City Savings Bank
In Account with Paul Trivier

Date	Withdrawal	Deposit	Interest	Balance
1921 Jan. 2		\$600.00	\$ 7.50	\$607.50
April 1			7.59	615.09
July 1		250.00	10.81	875.90
Oct. 1			10.95	886.85

5% interest a year

10. $\$2,900 - \$1,900 = \$1,000;$
 $\$1,000 + \$190 = \$1,190;$
 $\$190 \div \$2,900 = 7\%.$

Section 33.

Part 33a.

1-1.	Kind of Policy	Age	Face of Policy	Annual Premium
a.	10-year Term	15	\$8,000	\$40.00
b.	Straight Life	25	6,000	73.80
c.	20-Payment Life	35	5,000	130.00
d.	20-Year Endowment	40	7,500	332.20

1-2. 20-payment life: $\$5,000 \div 1,000 = \$5;$
 $\$5 \times 17.90 = \89.50 (age 20). 10-year term pol-
 icy: $\$5 \times 15.10 = \$25.50; \$89.50 - \$25.50 = \$64.00.$

1-3. 20-year endowment: $\$5,000 \div 1,000 = \$5;$
 $\$5 \times 41.20 = \206.00 (age 20). Straight life policy:
 $\$5 \times 10.90 = \$54.50; \$206.00 - \$54.50 = \$151.50.$

1-4. 20-year endowment: $\$8,000 \div 1,000 = \$8;$
 $\$8 \times 41.20 = \329.60 (age 20). 20-payment life
 policy: $\$8 \times 17.90 = \$143.20; \$329.60 - \$143.20 = \$186.40.$

Section 33:

Unit 8.

Part 33a-Review Assignment 33a.

Exercises 4-9 (for Part 33a),
and Exercises 1 (for Review Assignment 33a).

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1-5. 10-year term policy: $\$3,000 \div 1,000 = \3 ;
 $\$3 \times 5.20 = \15.20 (age 25). Straight life policy:
 $\$3 \times 12.30 = \36.90 ; $\$36.90 - \$15.20 = \$21.70$.

1-6. Straight life policy: $\$6,000 \div 1,000 = \6 ;
 $\$6 \times 17.70 = \106.20 (age 35). Straight life policy:
 $\$6 \times 12.30 = \73.80 (age 25). $\$106.20 - \$73.80 = \$32.40$.

1-7. 20-payment life policy: $\$5,000 \div 1,000 = \5 ;
 $\$5 \times 20.00 = \100.00 (age 20); $\$100 \times 20 = \$2,000$.

1-8. 20-payment life policy: $\$30,000 \div 1,000 = \30 ;
 $\$30 \times 30.15 = \904.50 (age 40). 20-year endowment
policy: $\$30 \times 44.30 = \$1,329.00$, $20 \times \$904.50$
 $= \$18,090$; $20 \times \$1,329.00 = \$26,580$; $\$26,580 - \$18,090 = \$8,490$.

1-9. Straight life insurance: a. $\$14.70 \times 27 = \396.90 .
20-payment life insurance: b. $\$22.70 \times 17 = \385.90 .
10-year term insurance: c. $\$5.40 \times 74 = \399.60 .
(age 30).

1. endowment life insurance: (h) Insured and pays premiums for a fixed time only; gets cash at end of time.
insured: (c) Person whose life is insured.

insurer: (b) Insurance company.

limited-payment life insurance: (g) Insured for lifetime; pays premiums for a fixed time.

policy: (d) Insurance contract.

premium: (a) Amount paid for insurance.

straight-life insurance: (f) Insured and pays premiums for lifetime.

term-life insurance: (e) Insured and pays premiums for a fixed time; no benefits after.

Unit 8.

Section 33.

Review Assignment 33a — Part 33b.

Exercises 2-7 (for Review Assignment 33a),
and Exercise 2 (for Part 33b).

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Review Assignment
Part 33a (continued)

2. a. \$3.30 is $66\frac{2}{3}\%$ greater than \$1.98.
 b. \$3.15 is $12\frac{1}{2}\%$ less than \$3.60.
 c. $\$955 \times 7\% (\$66.85)$ for 24 days = \$4.46.
 d. $2 \text{ kg} \div 8 = 2000 \text{ g} \div 8 = 250 \text{ g}.$

3. 20-year endowment: $\$10,000 \div 1,000 = \$10;$
 $\$10 \times 42.60 = \426.00 (age 35). 20-year endowment
 $\$10 \times 41.45 = \414.50 (age 25); $\$426.00 - \$414.50 = \$11.5$

4. $\$5.20 \times 57 = \296.40 (age 25).

5. $\$5.13 - \$4.75 = \$0.38$, 8% increase.

6. March 7 to Nov 5: 80 days.
 $\$700 \times 10\% = \$7;$ $360 \div 80 = 4.5;$
 $\$7.00 \div 4.5 = \$1.56;$ $\$700.00 + \$1.56 = \$701.56.$

7. a. \$7.22 is 75% of \$10.56.
 b. $\$10.40 \times \frac{3}{4} = \$7.80.$

Part 33b. 2-1. $\$20,000 \div \$1,000 = 20;$
 $20 \times \$152 = \$3,040$ (15 years).

2-2. $\$30,000 \div \$1,000 = 30;$
 $30 \times \$77 = \$2,310$ (10 years).

2-3. $\$25,000 \div \$1,000 = 25;$
 $25 \times \$446 = \$11,150$ (20 years).

2-4. 22 years and 347 days for 15 years.

Section 33.

Unit 8.

Part 33b. - Review Assignment 33b.

Exercises 2-3 (for Part 33b),

and Exercise 1 (for Review Assignment 33b).

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$$2-5. \$25,000 \div \$1,000 = 25;$$

$$25 \times \$224 = \$5,600 \text{ (20 years).}$$

$$2-6. \$840 \times 6\% = \$50.40;$$

April 12 to August 10: 120 days;

$$\$50.40 \div 3 = \$16.80; \$840.00 + \$16.80 + \$103.00 = \$959.80.$$

$$3-1. \$5,000 \div \$1,000 = 5;$$

$$5 \times \$15.60 = \$78.00;$$

$$\$78.00 - \$13.75 = \$64.25.$$

$$3-2. \$15,000 \div \$1,000 = 15;$$

$$15 \times \$23.50 = \$352.50;$$

$$\$352.50 - \$42.00 = \$310.50.$$

$$3-3. \$10,000 \div \$1,000 = 10;$$

$$10 \times \$25.45 = \$254.50; 20 \times \$254.50 = \$5,090.00;$$

$$-\$5,090.00 - \$827.30 = \$4,262.70.$$

$$3-4. \$9,000.00 \div \$1,000.00 = 9; 9 \times \$17.65 = \$158.85;$$

$$10 \times \$158.85 = \$1,588.50; 9 \times \$102 = \$918;$$

$$\$918.00 + \$267.34 = \$1,185.34; \$1,588.50 - \$1,185.34 = \$403.16.$$

$$3-5. \$784.65 \times 5\frac{1}{2}\% = \$43.16.$$

1. beneficiary: (c) Person to whom policy is paid when you die.

Cash value: (a) Amount you get if you cancel a policy.

dividend: (f) A return to part of the premium.

extended term life insurance: (e) Full coverage for limited time.

paid-up life insurance: (d) Smaller amount of insurance for life; no more premiums.

policy loan: (b) Borrowing on life insurance.

Unit 8.

Section 33.

Review Assignment 33b.

Exercises 2-10.

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Review Assignment 33b (continued)

2. a. $\$26.60$ plus 25% of itself = $\$33.25$.

b. $122\frac{3}{8}\% = 1.22375$.

c. $\$2,400 \times 9\% (\$216)$ for 160 days = $\$96.00$.

3. $\$8,000 \div \$1,000 = 8$; $8 \times \$21.40 = \171.20 ;
 $\$171.20 - \$52.81 = \$118.39$.

4. a. $\$30,000 \div \$1,000 = 30$; $30 \times \$105 = \$3,150$;
 $12 \times \$3,150 = \$37,800$.

b. $\$37,800 \times 6\% = \$2,268$.

5. $\$20,000 \div \$1,000 = 20$; $\$160 \times 5 = \800 ;
 $\$800 \times 20 = \$16,000$.

6. $\$20,000 - \$1,000 = 19$; $19 \times \$14.70 = \279.30 ;
 $15 \times \$279.30 = \$4,189.50$; $\$20,000 - \$4,189.50 = \$15,810.50$.

7. $33\frac{1}{3}\%$ of $\$315 = \105 ; $\$315 - \$105 = \$210$;
 $\$210 \div \$14 = 15$.

8. $\$5,715 - \$2,915 = \$2,800$;
 $\$2,800 + \$560 = \$3,360$; $\$3,360 \div 24 = \140 .

9. $\$68 + \$550 = \$618$; $\$618 \div 24 = \25.75 ;
 $\frac{\$25.75 \times 100}{\$68} = \frac{\$2,575}{\$68} = \$37.87 = 26\frac{1}{2}\%$.

10. a.
$$\begin{array}{r} 5.2 \text{ m} \\ \times 7.5 \text{ m} \\ \hline 260 \\ 364 \\ \hline 39.00 \text{ m}^2 \end{array}$$

b.
$$\begin{array}{r} \$15.00 \\ \times 39 \text{ m}^2 \\ \hline 135.00 \\ 450.00 \\ \hline \$585.00 \end{array}$$

Sections 33-34.

Unit 8.

Review Assignment 33b - Part 34a,
Exercise 11 (for Review Assignment 33b),
and Exercises 1-2 (for Part 34a).

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11.	Checkbook balance:	\$ 716.11
	Less:	
	Service charge	1.88
	Sub-total:	\$ 714.23
	Add:	
	Amount on check (too large)	\$ 18.00
	Deposit not recorded	28.33
		46.33
	Correct checkbook balance	\$ 760.56

Section 34.

- 1-1. $0.98 \times \$1,000 = \980
 1-2. $0.96 \times \$1,000 = \960
 1-3. $1.03 \times \$1,000 = \$1,030$
 1-4. $1.09 \times \$1,000 = \$1,090$
 1-5. $0.975 \times \$1,000 = \975
 1-6. $1.075 \times \$1,000 = \$1,075$
 1-7. $0.995 \times \$1,000 = \995
 1-8. $0.9675 \times \$1,000 = \967.50
 1-9. $1.0175 \times \$1,000 = \$1,017.50$
 1-10. $0.9725 \times \$1,000 = \972.50
 1-11. $0.98125 \times \$1,000 = \981.25
 1-12. $1.04125 \times \$1,000 = \$1,041.25$

- 2-1. a. $.99 \times \$1,000 = \990 ; $5 \times \$990 = \$4,950$
 b. $.95 \times \$1,000 = \950 ; $3 \times \$950 = \$2,850$
 c. $1.04 \times \$1,000 = \$1,040$; $6 \times \$1,040 = \$6,240$
 d. $1.10 \times \$1,000 = \$1,100$; $4 \times \$1,100 = \$4,400$
 2-2. a. $.95 \times \$1,000 = \950 ; $7 \times \$950 = \$6,650$
 b. $.98 \times \$1,000 = \980 ; $5 \times \$980 = \$4,900$
 c. $1.07 \times \$1,000 = \$1,070$; $8 \times \$1,070 = \$8,560$
 d. $1.16 \times \$1,000 = \$1,160$; $12 \times \$1,160 = \$13,920$

Unit 8,

Section 34.

Part 34a - Previous Assignment 34a.

Exercise 2 (for Part 34a),

and Exercises 1-6 (for Previous Assignment 34a).

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Exercise 2
(continued).

2-3. a. $.985 \times \$1,000 = \985 ; $3 \times \$985 = \$2,955$

b. $.945 \times \$1,000 = \945 ; $6 \times \$945 = \$5,670$

c. $.935 \times \$1,000 = \935 ; $9 \times \$935 = \$8,415$

d. $1.065 \times \$1,000 = \$1,065$; $7 \times \$1,065 = \$7,455$

2-4. a. $.90 \times \$500 = \450 ; $4 \times \$450 = \$1,800$

b. $.98 \times \$500 = \490 ; $8 \times \$490 = \$3,920$

c. $1.055 \times \$500 = \527.50 ; $10 \times \$527.50 = \$5,275$

d. $1.1275 \times \$500 = \563.75 ; $6 \times \$563.75 = \$3,382.50$

Previous Assignment
34a.

1. bonds (a) Long-term promissory note.
discount: (c) selling price below par.
maturity value: (e) face value on bond.
par value. (b) Any selling price of a bond.
premium: (d) selling price above par.

2. a. $\$2.43$ is 25% greater than $\$1.92$.

b. $\$32.40$ increased by $37\frac{1}{2}\%$ of its value gives $\$52.80$

c. $\$84$ is 25% less than $\$112$.

d. $990 \div 22,000 = .045$

e. $95\frac{1}{2}\%$ of $\$1,000 = \955 .

3. $.96 \times \$1,000 = \960 ; $9 \times \$960 = \$8,640$

4. $1.0475 \times \$1,000 = \$1,047.50$; $15 \times \$1,047.50 = \$15,712.50$

5. $\$130 - \$10 = \$120$; 10% of $\$120 = \12 ;

$\$120 + \$12 = \$132$; $\$132 \div 12 = \11 .

6. $\$40 \div 8 = \5 ; $\$5 \times 12 = \60 ;

$\$60 \div \$750 = 8\%$.

Section 34.

Unit 8.

Review Assignment 34a - Part 34b.

Exercises 7-10 (for Review Assignment 34a),
and Exercise 3 (for Part 34b).

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7. In Account with Cathy Clifford

Date	Withdrawal	Deposit	Interest	Balance
Jan. 2 ¹⁹⁸¹		\$620.00	\$ 9.30	\$ 629.30
Apr. 1			9.44	638.74
July 1			9.58	648.32
Oct. 1			9.72	658.04

6% interest a year

8. Due date on 75-day note dated June 9: Aug. 23.
 $360 \div 75 = 4.8$; $\$9,260 \times 5\% (\$63)$ for 75 days = $\$13.13$.

9. a. $\$27.50 - 4\%$ of itself = $\$26.40$.
 b. $0.25\% = \frac{25}{10,000} = \frac{1}{400}$

10. $100\% - 5\% = 95\%$;
 $\$15,200 \div .95 = \$16,200$.

3-1. a. $.87 \times \$1,000 = \870 ; $\$870 \times 8 = \$6,960$;
 $\$5 \times 8 = \40 ; $\$6,960 + \$40 = \$7,000$.
 b. $.94 \times \$1,000 = \940 ; $\$940 \times 12 = \$11,280$;
 $\$5 \times 12 = \60 ; $\$11,280 + \$60 = \$11,340$.
 c. $.9125 \times \$1,000 = \912.50 ; $\$912.50 \times 12 = \$10,950$;
 $\$5 \times 12 = \60 ; $\$10,950 + \$60 = \$11,010$.
 d. $.935 \times \$1,000 = \935 ; $\$935 \times 16 = \$14,960$;
 $\$5 \times 16 = \80 ; $\$14,960 + \$80 = \$15,040$.
 e. $1.02 \times \$1,000 = \$1,020$; $\$1,020 \times 8 = \$8,160$;
 $\$5 \times 8 = \40 ; $\$8,160 + \$40 = \$8,200$.
 f. $1.1675 \times \$1,000 = \$1,167.50$; $\$1,167.50 \times 14 = \$16,345$;
 $\$5 \times 14 = \70 ; $\$16,345 + \$70 = \$16,415$.

Unit 8.

Section 34.

Part 34b - Review Assignment 34b.

Exercises 3-4 (for Part 34b),

and Exercise 1 (for Review Assignment 34b).

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Exercise 3
(continued).

$$3-2. .905 \times \$1,000 = \$905; \$905 \times 7 = \$6,335;$$

$$\$5 \times 7 = \$35; \$6,335 + \$35 = \$6,370.$$

$$3-3. .875 \times \$1,000 = \$875; \$875 \times 9 = \$7,875;$$

$$\$5 \times 9 = \$45; \$7,875 + \$45 = \$7,920.$$

$$3-4. 1.0325 \times \$1,000 = \$1,032.50; \$1,032.50 \times 12 = \$12,390;$$

$$\$5 \times 12 = \$60; \$12,390 + \$60 = \$12,450.$$

$$3-5. .9525 \times \$1,000 = \$952.50; 4 \times \$952.50 = \$3,810;$$

$$.875 \times \$1,000 = \$875.00; 6 \times \$875.00 = \$5,250;$$

$$\$3,810 + \$5,250 = \$9,060.$$

4-1. Bethlehem Steel Co.: 9% annual interest.

4-2. Ford - Watch: the year 1900.

4-3. Chrysler Corp.: $84\frac{3}{4}$, or $\$842.50$.4-4. U.S. Steel: $104\frac{1}{4}$, or $\$1,040.00$.4-5. General Electric: $104\frac{3}{4}$, or $\$1,047.50$
($\$1,042.50 + \$5.00 = \$1,047.50$).4-6. Pepsi Cola: $116\frac{1}{2}$, or $\$1,165.00$
($\$1,162.50 + \$2.50 = \$1,165.00$).

Review Assignment 34b.

1. a. $\$5.50$ is $33\frac{1}{3}\%$ less than $\$8.25$.b. $\$16.20$ increased by $62\frac{1}{2}\%$ of itself gives $\$27.30$.c. $102\frac{5}{8}\% = 1.02625$.d. $\$1,800 \times 5\% (\$90)$ for 140 days = $\$35.00$.

Section 34.
Review Assignment 34b.
Exercises 2-10.

Unit 8.

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2. $.945 \times \$1,000 = \945 ; $8 \times \$945 = \$7,560$;
 $8 \times \$5 = \40 ; $\$7,560 + \$40 = \$7,600$.

3. $.8975 \times \$500 = \448.75 ; $7 \times \$448.75 = \$3,141.25$;
 $7 \times \$5 = \35 ; $\$3,141.25 + \$35.00 = \$3,176.25$.

4. $1.22625 \times \$1,000 = \$1,226.25$; $12 \times \$1,226.25 = \$14,715$;
 $\$5 \times 12 = \60 ; $\$14,715 + \$60 = \$14,775$.

5. $35 - 2\frac{1}{2} = 32\frac{1}{2}$

$$\begin{array}{r} \$5.25 \\ \times 32\frac{1}{2} \\ \hline 22'625 \\ 1050 \\ 1575 \\ \hline \end{array}$$

6. $\begin{array}{r} \$19.10 \\ \times 36 \\ \hline 11460 \\ 5730 \\ \hline \$687.60 \end{array}$

$\$170.625 = \170.62

7. $\$335.00 - \$35.00 = \$300.00$;
15% of $\$300 = \45 ; $\$300 + \$45 = \$345$;
 $\$345 \div \$23 = \$15$.

8. $\$600 + \$84 = \$684$; $\$684 \div 24 = \28.50 ;
 $\frac{\$84.00 \times 100}{\$600} = \frac{\$8400.00}{\$600} = \$14.00 = 13\%$.

9. a. $165\% \times \$32.00 = \52.80 ;
b. $78\% \times \$45.00 = \35.10 ;
c. $165\% \times \$30.00 = \49.50 .

10. a. $\$291.20$ is 65% of $\$448.00$;
b. $0.16\% = \frac{16}{1,000} = \frac{2}{125}$

Unit 8.

Sections 34-35.

Review Assignment 34b - Part 35a.

Exercise 11 (for Review Assignment 34b),
and Exercises 1-2 (for Part 35a).

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Review Assignment 34b (continued)

11. $100\% - 45\% = 55\%$; $\$77 \div .55 = \140 .

Section 35.

Part 35a.

- 1-1. a. 15 \$1,000, 5% bonds = $\$15,000 \times 5\% = \750 .
 b. 20 \$1,000, 4% bonds = $\$20,000 \times 4\% = \800 .
 c. 15 \$1,000, 6% bonds = $\$15,000 \times 6\% = \900 .
 d. 3 \$500, 7% bonds = $\$1,500 \times 7\% = \105 .
 e. 9 \$500, 9% bonds = $\$4,500 \times 9\% = \405 .
 f. 18 \$1,000, $4\frac{1}{2}\%$ bonds = $\$18,000 \times 4\frac{1}{2}\% = \810 .
 g. 7 \$1,000, $6\frac{1}{2}\%$ bonds = $\$7,000 \times 6\frac{1}{2}\% = \455 .
 h. 16 \$1,000, $5\frac{3}{4}\%$ bonds = $\$16,000 \times 5\frac{3}{4}\% = \920 .
 i. 10 \$1,000, $8\frac{1}{2}\%$ bonds = $\$10,000 \times 8\frac{1}{2}\% = \850 .
 j. 6 \$1,000, $9\frac{1}{4}\%$ bonds = $\$6,000 \times 9\frac{1}{4}\% = \555 .

1-2. 21 \$1,000, $9\frac{1}{2}\%$ bonds = $\$21,000 \times 9\frac{1}{2}\% = \$1,995$.

1-3. 1 \$1,000, 8% bond = $\$1,000 \times 8\% \times \frac{1}{2} = \40 .

1-4. 6 \$1,000, $8\frac{1}{4}\%$ bonds = $\$6,000 \times 8\frac{1}{4}\% = \495 .

1-5. 6 \$1,000, $7\frac{1}{2}\%$ bonds = $\$6,000 \times 7\frac{1}{2}\% \times \frac{1}{2} = \225 .

	Bonds Owned	Par Value per Bond	Price Paid	Commission per Bond	Total Investment	Interest Rate	Annual Income
2-1.	15	\$1,000	95	\$5.00	\$14,325	9%	\$1,350
2-2.	8	\$1,000	$86\frac{1}{2}$	\$5.00	\$6,960	5%	\$400
2-3.	20	\$1,000	$102\frac{1}{2}$	\$5.00	\$20,600	$6\frac{1}{2}\%$	\$1,300
2-4.	50	\$1,000	$93\frac{3}{4}$	\$2.50	\$46,750	$5\frac{1}{2}\%$	\$2,750
2-5.	5	\$1,000	102	\$10.00	\$5,150	7%	\$350
2-6.	10	\$500	98	\$5.00	\$4,950	$8\frac{3}{4}\%$	\$437.50

Section 35.

Review Assignment 35 a.

Exercises 1-6.

Unit 8.

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$$\begin{array}{r} \overset{\frac{1}{2}}{1. a.} \ \$15,000 \\ \times 0.0425 \\ \hline 75000 \\ 30000 \\ 60000 \\ \hline \end{array}$$

$$= \$637.5000$$

b. $\$1,190.000$

$$\begin{array}{r} 34,000 \overline{) \$1,190.000} \\ 102000 \\ \hline 170000 \\ 170000 \\ \hline \end{array}$$

c. $\$10.80$ is 40% less than $\$18.00$.

d. $\$56.70$ increased by $16\frac{2}{3}\%$ of itself gives $\$66.15$.

e. $112\frac{7}{8}\% = 1.12875$.

f. 35% of $625m^2 = 218.75m^2$.

2. $15 \$1,000, 4\frac{1}{2}\%$ bonds $= \$15,000 \times 4\frac{1}{2}\% = \675 .

3. a. $1 \$1,000, 6\%$ bond $= \$1,000 \times 6\% \times \frac{1}{2} = \30 .

b. $20 \$1,000, 6\%$ bonds $= \$20,000 \times 6\% \times \frac{1}{2} = \600 .

4. $1.08875 \times \$1,000 = \$1,088.75$;

$3 \times \$1,088.75 = \$3,266.25$;

$3 \times \$5 = \15 ; $\$3,266.25 + \$15.00 = \$3,281.25$.

$$\begin{array}{r} \overset{3}{5.} \ \$10,400 \\ \times .0613 \\ \hline 31200 \\ 10400 \\ 62400 \\ \hline \end{array}$$

$$= \$637.5200$$

$$\begin{array}{r} \overset{1}{6.} \ \$6.00 \\ \times 34\frac{1}{2} \\ \hline 300 \\ 2400 \\ 1800 \\ \hline \end{array}$$

$$37\frac{1}{2} \$207.00$$

$$= \$9.00$$

$$\times 3$$

$$= \$27.00$$

$$+ 207.00$$

$$= \$234.00$$

Unit 8.

Section 35.

Review-Assignment 35a-Part 35b:

Exercises 7-9 (for Review Assignment 35a),
and Exercise 3 (for Part 35b).

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Review-Assignment
35a (continued).

7. a. \$4.95 is $\frac{3}{4}$ of \$8.25.

b. $\frac{5}{8} = .00625$.

c. $\$28 + \frac{1}{2}$ of $\$28 = \42

8. $\$51,700 + \$1,000 = \$52,700$;

6% of $\$52,700 = \$3,162$;

$\$52,700 + \$3,162 = \$55,862$.

9. $\$18,000 \times 1\% = \180 ; $\$18,000 - \$6,000 = \$12,000$;

$\$12,000 \times 2\% = \240 , $\$15,000 \times 1\% = \150 ;

$\$15,000 - \$6,000 = \$9,000$; $\$9,000 \times 2\% = \180 ;

$\$20,700 \times 1\% = \208 ; $\$20,800 - \$6,000 = \$14,800$;

$\$14,800 \times 2\% = \296 .

$$\begin{array}{r} \$650 \\ 180 \\ \hline \end{array}$$

$$\begin{array}{r} + 240 \\ \hline \$1,070 \end{array}$$

$$\begin{array}{r} \$650 \\ 150 \\ \hline \end{array}$$

$$\begin{array}{r} + 180 \\ \hline \$980 \end{array}$$

$$\begin{array}{r} \$650 \\ 208 \\ \hline \end{array}$$

$$\begin{array}{r} + 296 \\ \hline \$1,154 \end{array}$$

$$\begin{array}{r} \$1,070 \\ 980 \\ \hline \end{array}$$

$$\begin{array}{r} + 1,154 \\ \hline \$3,204 \end{array}$$

$\$3,204 \div 3 = \$1,068$

Part 35b.

3-1.	Par Value	Interest Rate	Market Price	Commission	Rate of Income
a.	\$1,000	9%	96 $\frac{1}{2}$	\$2.50	9.3%
b.	\$1,000	8%	84 $\frac{1}{2}$	\$5.00	9.4%
c.	\$1,000	12%	108 $\frac{1}{4}$	\$2.50	11.1%
d.	\$1,000	7 $\frac{1}{2}$ %	86 $\frac{3}{4}$	\$2.50	8.6%
e.	\$1,000	11 $\frac{1}{2}$ %	105 $\frac{3}{4}$	\$5.00	10.8%
f.	\$1,000	6 $\frac{1}{2}$ %	83	\$5.00	7.8%
g.	\$1,000	5 $\frac{3}{4}$ %	89	\$2.50	6.4%

Section 35.

Part 35b: - Review Assignment 35b.

Exercises 3-4. (for Part 35b),

and Exercises 1-2 (for Part 35a).

$$3-2. \$1,000 \times .6975 = \$697.50; \$697.50 + \$2.50 = \$700.00;$$

$$\$1,000 \times 5\% = \$50; \$50 \div \$700 = 7.1\%.$$

$$3-3. \$1,000 \times 1.05 = \$1,050.00; \$1,050.00 +$$

$$\$1,000 \times 9\frac{1}{2}\% = \$95; \$95 \div \$1,050 = 9.0\%.$$

$$3-4. \$1,000 \times .85 = \$850;$$

$$\$1,000 \times 7\frac{1}{2}\% = \$75; \$75 \div \$850 = 8.8\%.$$

$$3-5. \$1,000 \times .90 = \$900;$$

$$\$1,000 \times 7\% = \$70; \$70 \div \$900 = 7.8\%.$$

$$3-6. \$1,000 \times 1.12 = \$1,120;$$

$$\$1,000 \times 12\% = \$120; \$120 \div \$1,120 = 10.7\%.$$

$$4-1. a. \$1,000 \times 5\% = \$50.$$

$$b. \$800 \div \$50 = 16.$$

$$4-2. \$1,000 \times .935 = \$935; \$1,000 \times 6\% = \$60;$$

$$a. \$1,500 \div \$60 = 25.$$

$$b. \$935 \times 25 = \$23,375.$$

$$4-3. \$1,000 \times .755 = \$755; \$1,000 \times 5\frac{1}{2}\% = \$55;$$

$$\$2,200 \div \$55 = 40; \$755 \times 40 = \$30,200.$$

$$4-4. \$1,000 \times .86 = \$860; \$1,000 \times 7\% = \$70;$$

$$\$4,550 \div \$70 = 65; \$860 \times 65 = \$55,900.$$

$$4-5. a. \$1,000 \times .67 = \$670; \$1,000 \times .50 = \$500;$$

$$\$1,000 \times 5\frac{1}{2}\% = \$55; \$1,000 \times 4\frac{1}{2}\% = \$45;$$

$$\$55 \div \$670 = 8.2\%; \$45 \div \$500 = 9\% \text{ (higher yield)}.$$

$$b. \$1,980 \div \$45 = 44; \$500 \times 44 = \$22,000.$$

Unit 8.

Section 35.

Review Assignment 35B.

Exercises 1-6.

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Part 35B
ment 35B.

1. broker (c) Dealer in stocks and bonds.
commission: (a) Broker's fee.
yield: (b) Rate of income on bonds.

$$\begin{array}{r}
 2. a. \$13,000 \quad b. \quad .0625 \\
 \times .082125 \quad 840 \overline{) 52.5000} \\
 \hline
 104000 \quad 5040 \\
 26000 \quad 2100 \\
 13000 \quad 1680 \\
 26000 \quad 4200 \\
 104000 \quad 4200 \\
 \hline
 \$1067625000
 \end{array}$$

$$= \$1,057.63$$

c. \$39.12 is $18\frac{1}{2}\%$ less than \$48.00.d. \$2.25 is $37\frac{1}{2}\%$ less than \$3.60.

$$e. \$720 \times 6\% (\$43.20) \text{ for 40 days} = \$4.80$$

$$3. 8 \$1,000, 6\frac{3}{4}\% \text{ bonds} = \$8,000 \times 6\frac{3}{4}\% = \$540.$$

$$4. \$1,000 \times .96 = \$960; \$1,000 \times 6\% = \$60; \\ \$60 \div \$960 = 6.3\%.$$

$$5. \$1,000 \times .92125 = \$921.25; \$921.25 + \$5.00 = \$926.25; \\ 4 \times \$926.25 = \$3,705.00.$$

6. In Account with Barbara Vojta!

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$400.00		\$400.00
Apr. 1			\$6.00	406.00
Jul. 1			6.09	412.09
Oct. 1			6.18	418.27
1982 Jan. 2			6.27	424.54

6% interest a year

Sections 35-36,

Unit 8.

Review Assignment 35b - Part 36a.

Exercises 7-11 (for Review Assignment 35a [and Teresa!])
and Exercises 1 (for Part 36a).

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7. $\$450 - \$50 = \$400$; $\$400 \times 9\% = \36 ;
 $\$400 + \$36 = \$436$; $\$436.00 + \$9.50 = \$445.50$;
 $\$445.50 \div 18 = \24.75 .

8. ~~##~~ 180

52) $\$9,360$

52

4160

4160

9. Oct. 3 to Dec. 12 = 70 days.

$\$550 \times 10\% = \55 ;

$\$550 + \$55 = \$605$.

10. a. $\$8.40$ is 25% smaller than $\$11.20$.

b. $\$3.60$ is $\frac{5}{6}$ of $\$4.32$.

11. $\$1,000 \times 7\frac{1}{2}\% = \75 ; $\$2,400 \div \$75 = 32$.

Section 36.

	No. of Shares	Name of Stock	Market Price	Commission	Total Cost
-1.	100	Coca Cola Bottling Co.	$8\frac{1}{8}$	\$29.00	\$841.50
-2.	200	Eastman Kodak	$41\frac{1}{8}$	136.00	8,361.00
-3.	50	Dow Chemical	$22\frac{5}{8}$	33.50	1,164.75
-4.	100	Exxon	$44\frac{3}{8}$	76.00	4,513.50
-5.	30	Ford Motor Co.	$32\frac{1}{4}$	30.90	998.40
-6.	200	International Harvester	$27\frac{3}{8}$	106.00	5,581.00
-7.	100	Kraft Foods	43	74.00	4,374.00
-8.	75	Woolworth	$17\frac{3}{4}$	36.75	1,368.00
-9.	100	Philadelphia Electric	$18\frac{1}{2}$	45.00	1,895.00
-10.	150	Zenith	$11\frac{7}{8}$	55.00	1,836.25

-11. $150 \times \$42.375 = \$6,356.25$;

$\$6,356.25 + \$82.00 = \$6,438.25$.

-12. $100 \times \$26.50 = \$2,650.00$;

$\$2,650.00 + \$51.00 = \$2,701.00$.

Unit 8.

Section 36.

Review Assignment 36a.

Exercises 1-6.

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Review Assignment 36a.

1. dividends: (c) Profits distributed to shareholders.
 market price: (f) Selling price of stock.
 no-par stock: (e) Stock without par value.
 par value: (d) Value printed on certificate.
 shareholder: (a) Anyone who owns stock; a stockholder.
 stock certificate: (b) A paper showing shares owned.

$$\begin{array}{r}
 2. \text{ a. } \$14,000 \\
 \times 1.1675 \\
 \hline
 11170000 \\
 98000 \\
 84000 \\
 14000 \\
 14000 \\
 \hline
 \$16345.0000 \\
 = \$16,345
 \end{array}$$

$$b. 75 \times 2\frac{4}{5} = \frac{75}{1} \times \frac{14}{5} = 210$$

$$\begin{array}{r}
 c. \quad .0375 \\
 1,800 \overline{) 67.5000} \\
 \underline{5400} \\
 13500 \\
 \underline{12600} \\
 9000 \\
 \underline{9000}
 \end{array}$$

d. \$3.30 is $33\frac{1}{3}\%$ less than \$4.95.

e. $\$1,600 \times 8\frac{1}{2}\% (\$136)$ for 90 days = \$34.

3. $85 \times \$33.00 = \$2,805.00$;
 $\$2,805.00 + \$45.25 = \$2,850.25$.

4. $\$12,000 \times 7\frac{1}{2}\% = \900 .

5. $1.25 \times \$500 = \625 ; $8 \times \$625 = \$5,000$;
 $6\frac{1}{2}\% \times \$500 = \32.50 ; $\$32.50 \div \$5,000 = 0.6\%$.

6. $18 \times \$15.25 = \274.50 ; $\$274.50 - \$250.00 = \$24.50$;
 $\frac{\$24.50 \times 100}{\$250.00} = \frac{\$2,450}{\$250} = \$9.80 = 12\%$.

Section 36.

Unit 8.

Review Assignment 36a - Part 36b.
Exercises 7-9 (for Review Assignment 36a),
and Exercise 2 (for Part 36b).

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$$\begin{array}{r}
 7. \text{ a. } \begin{array}{r} 12.0^{\overset{10}{m}} \\ - 2.4^{\overset{10}{m}} \\ \hline 9.6^{\overset{10}{m}} \end{array} \quad \text{b. } \begin{array}{r} \$8.50^{\overset{6}{}} \\ \times 12^{\overset{6}{m}} \\ \hline \$102.00^{\overset{6}{}} \end{array} \quad \begin{array}{r} \$8.50^{\overset{4}{}} \\ \times 9.6^{\overset{4}{}} \\ \hline 7650^{\overset{4}{}} \\ \$81.600 = \$81.60^{\overset{4}{}} \end{array} \\
 \text{c. } \begin{array}{r} \$102.00^{\overset{10}{}} \\ - 81.60^{\overset{10}{}} \\ \hline \$20.40^{\overset{10}{}} \end{array}
 \end{array}$$

$$\begin{array}{l}
 8. \text{ a. } \$2.64 \text{ is } \frac{3}{8} \text{ of } \$7.04 \\
 \text{b. } \$36 \text{ is } 25\% \text{ more than } \$28.80.
 \end{array}$$

$$\begin{array}{l}
 9. \$1,000 \times 8\frac{1}{4}\% = \$82.50; \\
 \$6,600 \div \$82.50 = 80.
 \end{array}$$

$$\begin{array}{l}
 2-1. \text{ a. Mobil Oil: } \$71.00. \\
 \text{b. Clorox: } \$10.125.
 \end{array}$$

$$\begin{array}{l}
 2-2. \text{ a. American Telephone & Telegraph: } \$60.00. \\
 \text{b. Clorox: } \$12.125.
 \end{array}$$

$$\begin{array}{l}
 2-3. \text{ a. Boeing: } \$32.375. \\
 \text{Coca-Cola: } \$36.50. \\
 \text{Polaroid: } \$24.125. \\
 \text{b. Clorox: } \$12.125.
 \end{array}$$

$$\begin{array}{l}
 2-4. \text{ a. Boeing, } +\frac{7}{8}; \text{ Coca-Cola, } +\frac{5}{8}; \\
 \text{Delta Airlines, } +\frac{1}{8}; \text{ Mobil Oil, } +\frac{1}{4}; \text{ Polaroid, } +\frac{3}{8}. \\
 \text{b. Alcoa, } -\frac{1}{4}; \text{ Clorox, } -\frac{1}{8}; \text{ Amer. Tel. \& Tel., } -\frac{3}{8}. \\
 \text{c. Allis-Chalmers and Western Union.}
 \end{array}$$

$$2-5. \text{ Mobil Oil: } 58\frac{3}{4} (58\frac{7}{8} - \frac{1}{4} = 58\frac{3}{4}).$$

$$2-6. \text{ Delta Airlines: } 37\frac{3}{8} (37\frac{1}{2} - \frac{1}{8} = 37\frac{3}{8}).$$

Unit 8.

Section 36.

Review Assignment 36b:
Exercises 1-8;

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Review Assignment 36b.

$$\begin{array}{r}
 1\frac{1}{2} \\
 1\frac{1}{2} \\
 1. \text{ a. } \$12,500 \\
 \times 0.0375 \\
 \hline
 62500 \\
 87500 \\
 37500 \\
 \hline
 \$468.7500 \\
 = \$468.75
 \end{array}$$

$$\begin{array}{r}
 105 \\
 16,000 \overline{) 1,680.000} \\
 \underline{16000} \\
 80000 \\
 \underline{80000} \\
 0
 \end{array}$$

c. \$877.40 is 5.48375% of \$16,000.00
d. \$598.25 \times 10% (\$59.83) for 45 days = \$7.48.

2. $60 \times \$35.50 = \$2,130.00$;
 $\$2,130.00 + \$37.69 = \$2,167.69$.

3. $\$14,000 \times 1.08 = \$15,120$;
 $\$14,000 \times 7\frac{3}{4}\% = \$1,085$.

4. $\$1,000 \times .75 = \750 ; $\$1,000 \times 4\frac{1}{2}\% = \45.00 ;
 $\$45 \div \$750 = 6\%$.

$$\begin{array}{r}
 1 \\
 5. \ \$9,000 \times 5\% = \$450 \\
 5,000 \times 6\frac{1}{2}\% = 325 \\
 + 2,200 \times 8\% = +176 \\
 \hline
 \$16,200 \qquad \qquad \$951
 \end{array}$$

6. Due date on 3-month note dated March 5: June 5.
 10% of \$950 \div 4 = \$23.75; $\$950.00 + \$23.75 = \$973.75$

7. $500 \div 10 \text{ kg} = 50$; $10 \text{ kg} - 3 \text{ kg} = 7 \text{ kg}$;
 $7 \text{ kg} \times 50 = 350$; $500 - 350 = 150$.

8. a. \$7.50 is $66\frac{2}{3}\%$ of \$11.25.
 b. \$35 increased by 320% gives \$112.

Sections 36-37.

Unit 8.

Review Assignment 36b - Part 37a.
Exercise 9 (for Review Assignment 36b),
and Exercises 1-2 (for Part 37a).

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$$\begin{aligned} 9. \quad & \$600 \div .075 = \$8,000; \\ & \$1,200 - \$600 = \$600; \\ & \$8,000 + \$10,000 = \$18,000. \end{aligned}$$

Section 37.

	Shares Owned	Par Value per Share	Dividend Rate	Total Annual Dividend
1-1.	75	\$100	5%, annually	\$375.00
1-2.	85	100	4%, annually	340.00
1-3.	100	50	6%, annually	300.00
1-4.	45	50	7%, annually	157.50
1-5.	60	—	\$.75 per share, quarterly	180.00
1-6.	55	—	\$1.25 per share, quarterly	275.00
1-7.	30	—	\$.45 per share, quarterly	54.00

2-1.	Total Cost per Share	Par Value per Share	Dividend Rate	Dividend Payable	Rate of Income
a.	\$75	\$100	5%	Annually	6.7%
b.	80	100	4%	Annually	5%
c.	40	50	6%	Annually	7.5%
d.	15	25	5%	Annually	8.3%
e.	30	—	\$.40 per share	Quarterly	5.3%
f.	50	—	\$.65 per share	Quarterly	5.2%
g.	60	—	\$.70 per share	Quarterly	4.7%
h.	20	—	\$.17½ per share	Quarterly	3.5%

$$\begin{aligned} 2-2. \quad & \$56\frac{1}{4} \times 4 = \$2.25; \\ & \$2.25 \div \$50 = 4.5\%. \end{aligned}$$

Unit 8.

Section 37.

Part 37a - Review Assignment 37a.

Exercises 2-3 (for Part 37a),

and Exercises 1-2 (for Review Assignment 37a).

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Exercise 2
(continued).

2-3. $\$3,000 \div 90 = \$33.33;$

$\$.50 \times 4 = \$2.00;$

$\$2.00 \div \$33.33 = 6\%.$

2-4. $\$59.125 \times 80 = \$4,730.00;$

$\$4,730.00 + \$70.00 = \$4,800.00;$

$\$50.00 \times 80 = \$4,000.00;$

$6\% \text{ of } \$4,000 = \$240; \$240 \div \$4,800 = 5\%.$

	Name of Stock	Shares	Dividend Yield	Current Price	Dividend and Fees	Net Proceeds
3-1	Common Stock	100	18	\$33.40	\$3.34	\$1,766.81
3-2	Preferred Stock	60	74	59.96	3.09	\$3,76.95
3-3	Common Stock	100	64	18.30	2.23	603.58
3-4	King Petroleum	200	44½	114.10	10.12	8,775.72
3-5	High Grade Oil	80	35¾	45.74	4.06	2,810.20

Review Assignment 37a.

1. Common stock: (c) Earning stock of a corporation.

not proceeds: (b) Market price less commission, taxes, and fees.

preferred stock: (a) Gets first choice in distributor's profits.

2. a. $\$12,000$ b. $\frac{206}{15,000} = 3,092.00$

$\times 1.125$

$\frac{9,000}{36,000}$

$\frac{18,000}{18,000}$

$\$20,250.00$

$= \$20,250$

c. $\$1,404 = 10.8\% \text{ of } \$13,000.$

d. $\$2,000 \times 9\frac{1}{2}\% (\$190) \text{ for } 80 \text{ days} = \$42.22.$

e. $40 \text{ km is } 12\frac{1}{2}\% \text{ of } 320 \text{ km.}$

Section 37.
Review Assignment 37a.
Exercises 3-10.

Unit 8.

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3. $90 \times \$.375 = \$33.75;$
 $\$33.75 \times 4 = \$135.00;$

4. $75 \times \$50.00 = \$3,750.00;$
 $\$3,750.00 \times 6\% = \$225.00.$

5. $\$3.75 \times 4 = \$15.00;$
 $\$15.00 \div \$200.00 = 7.5\%.$

6. $\$50.00 \times 6\% = \$3.00;$
 $\$3.00 \div \$75.00 = 4\%.$

7. $\$80$	$\$33.40$	$\$1,800.00$
$\times 22\frac{1}{2}$	$+ 4.04$	$- 37.44$
<u>140</u>	$\$37.44$	$\$1,762.56$
160		
<u>160</u>		
$\$1,800$		

8. $1.0625 \times \$1,000 = \$106.25;$ $20 \times \$106.25 = \$2,125.00;$
 $8\frac{1}{2} \times \$1,000 = \$85.00;$ $\$85.00 \div \$2,125.00 = 4\%.$

9. $\$24.25$	$\$582.00$
$\times 24$	$- 450.00$
<u>9700</u>	$\$132.00$
4850	
<u>58200</u>	
$\$582.00$	

10. $\$565.00 - \$85.00 = \$480.00;$
 $\$480.00 \times 9\% = \$43.20;$ $\$43.20 + \$18.00 = \$61.20;$
 $\$480.00 + \$61.20 = \$541.20;$
 $\$541.20 \div 24 = \$22.55.$

Unit 8.

Section 37.

Review Assignment 37a - Part 37b.

Exercises 11-12 (for Review Assignment 37a),
and Exercise 4 (for Part 37b).

228

Review Assignment 37a (continued)

$$11. 100\% - 35\% = 65\%;$$

$$\$22.00 \div 65 = \$28.20.$$

$$12. \$1,000 \times 6\frac{1}{2}\% = \$62.50;$$

$$\$500.00 \div \$62.50 = 8.$$

Part 37b.

4-1.	Name of Hotel	Days in Room	Days in Room	Room Rate	Days in Room	Room Rate	Days in Room
a.	Hotel France	40	13	\$25.35	18	\$24.50	\$+143.75
b.	Hotel Lila	105	8	22.40	9½	26.12	+101.41
c.	Hotel Lila	25	25	16.10	22	16.5	-132.57
d.	Hotel Lila	20	46	21.96	47	23.24	-25.28
e.	Hotel Lila	80	25	36.52	4½	57.00	+174.48
f.	Hotel Lila	100	3½	51.76	34½	57.71	+28.24

$$4-2. \$1.60 \times 8 = \$12.80; \$4.80 \times 40 = \$192.00;$$

$$\$192 + \$2,170 = \$2,362; \$2,362 - \$1,782 = \$580.$$

$$4-3. \$2.25 \times 6 = \$13.50; \$13.50 \times 10 = \$135.00;$$

$$\$135 + \$866 = \$1,001; \$1,001 - \$742 = \$259.$$

$$4-4. \$1.10 \times 5 = \$4.50; \$4.50 \times 20 = \$90.00;$$

$$\$90 + \$1.00 \times 3 = \$1,145; \$1,145 - \$1,118 = \$27.$$

$$4-5. 200 \times \$33.75 = \$6,750; \$6,750 + \$78 = \$6,828;$$

$$200 \times \$0.75 = \$150.00;$$

$$200 \times \$37.75 = \$7,550; \$83.95 + \$10.12 = \$94.07;$$

$$\$7,550.00 - \$94.07 = \$7,455.93;$$

$$\$7,455.93 + \$150.00 = \$7,605.93.$$

$$\$7,605.93 - \$6,828.00 = \$777.93.$$

Section 37.

Unit 8.

Part 37b - Review Assignment 37b.

Exercise 5 (for Part 37b),

and Exercise 1 (for Review Assignment 37b).

229

5-1. $\$4.20 \div 70 = 6\%$; $\$4.00 \div 70 = 5.7\%$

$\$2.25 \div 45 = 5\%$

Higher rate gets 6%.

5-2. $\$2.00 \div 40 = 5\%$ (Oil stock)

$\$1.65 \div 30 = 5.5\%$ (Mining stock)

Mining stock gets better investment.

5-3. $\$400 \div \$5 = 80$.

5-4. a. $\$900 \div \$3 = 300$.

b. $\$65 \times 300 = \$19,500$

$\$65 \times 3 = \195 ; $\$19,500 + \$195 = \$19,695$.

5-5. $4 \times \$1,875 = \$3,500$

$\$70 \div \$3.50 = 20$; $20 \times 45 = 900$

$\$900 + \$22 = \$922$

5-6. $\$75.00 \times 5\% = \3.75

$\$900.00 \div \$3.75 = 240$

1. a. $\begin{array}{r} \$17,000 \\ \times 0.01425 \\ \hline 1185000 \\ 34000 \\ 68000 \\ \hline 17000 \end{array}$

b. $\begin{array}{r} 1.028 \\ 13,000 \overline{) 364,000} \\ \underline{26000} \\ 104000 \\ \underline{104000} \\ 0 \end{array}$

$\$242.25000$
 $= \$242.25$

c. $\$1,023$ is 6.6% of $\$15,500$.

1. $\$625 \times 9\% (\$56.25)$ for 50 days = $\$7.81$.

2. 750 m is 25% of 3 km.

Unit 8.

Section 37.

Review Assignment 37b.

Exercises 2 & 9.

230

Review Assignment
37b (continued).

$$2. \quad 20 \times \$57.50 = \$1,150; \quad \$24.95 + \$1.03 = \$25.98;$$

$$\$1,150.00 - \$25.98 = \$1,124.02.$$

$$3. \quad 4 \times \$0.95 = \$3.80; \quad \$3.80 \times 80 = \$304.00;$$

$$\$304 + \$4,760 = \$5,064; \quad \$5,064 - \$4,200 = \$864.$$

$$4. \quad 4 \times \$2.25 = \$9.00; \quad \$9.00 \div \$120 = 7\frac{1}{2}\%.$$

$$5. \quad 80 \times \$1,000 = \$800; \quad \$1,000 \times 7\% = \$70;$$

$$\$70 \div \$800 = 8\frac{3}{4}\%.$$

$$6. \quad \$5,300 - \$1,500 = \$3,800;$$

$$\$3,800 + \$790 = \$4,590; \quad \$4,590 \div 30 = \$153.00.$$

$$7. \quad 12 \times \$23.75 = \$285.00; \quad \$285.00 - \$250.00 = \$35.00;$$

$$\frac{\$35.00 \times 100}{\$250} = \frac{\$3,500}{\$250} = \$14.00 = 25\%.$$

$$8. \quad \begin{array}{l} \text{Client: Bruce Catalano} \\ \text{Withholding allowance: } 5 \\ \text{Gross earnings: } \$224.75 \\ \text{Social security tax: } 13.78 \\ \text{Federal withholding tax: } 15.30 \\ \hline \text{Total deductions: } \$29.08 \\ \text{Net pay: } \$195.67 \end{array}$$

$$9. \quad \begin{array}{r} 3.5\text{m} \\ \times 2.4\text{m} \\ \hline 140 \\ 70 \\ \hline 8.40\text{m}^2 \end{array} \quad \begin{array}{r} 8.40\text{m}^2 \\ - 6.20\text{m}^2 \\ \hline 2.20\text{m}^2 \end{array}$$

Sections 37-38.

Unit 8.

Review Assignment 37b - Part 38a,
Exercises 10-11 (for Review Assignment 37b),
and Exercise 1 (for Part 38a).

231

10. a. \$25.60 decreased by $\frac{3}{8}$ of itself equals \$16.00.
b. $0.03 \frac{1}{3} = \frac{3\frac{1}{3}}{100} = \frac{10}{300} = \frac{1}{30}$

11. $100\% - 38\% = 62\%$;
 $\$108.50 \div .62 = \175.00 .

Section 38.

1-1.	Monthly Rent Income	Annual Expenses						Net Income
		Taxes	Repairs	Insur- ance	Inter- est	Depre- ciation	Other Expenses	
a.	\$280	\$710	\$370	\$145	\$725	\$560	\$25	\$825
b.	140	250	155	30	215	230	20	780
c.	235	425	215	50	0	375	19	1,736
d.	190	410	165	35	0	320	16	1,334

1-2. $\$45,000 - \$10,000 = \$35,000$;

$\$700 \times 12 = \$8,400$;

$9\frac{1}{2}\%$ of $\$35,000 = \$3,325$; 2% of $\$35,000 = \700 ;

$\$3,325 + \$700 + \$3,200 = \$7,225$;

$\$8,400 - \$7,225 = \$1,175$.

1-3. $\$86,000 - \$26,000 = \$60,000$;

$\$265 \times 12 = \$3,180$; $\$3,180 \times 4 = \$12,720$.

7% of $\$60,000 = \$5,400$; 3% of $\$66,000 = \$1,980$;

$\$5,400 + \$1,980 + \$3,600 = \$10,980$;

$\$12,720 - \$10,980 = \$1,740$.

Section 38.

Part 38a - Review Assignment 38a.

Exercise 2 (for Part 38a),

and Exercises 12 (for Review Assignment 38a).

232

2-1.	Cash Investment	Monthly Rental Inc.	Annual Expenses		
			Interest on Mortgage	Other Expenses	Rate of Income
a.	\$20,000	\$400	\$10,000@8%	\$2,050	9.8%
b.	14,000	280	\$10,000@9%	1,460	7.1%
c.	15,000	350	\$10,000@4½%	1,580	11.1%
d.	10,000	500	\$30,000@7½%	2,835	9.2%
e.	25,000	380	None	1,750	11.2%

$$2-2. \$52,000 - \$12,000 = \$40,000;$$

$$2 \times \$370 = \$740; 1\% \text{ of } \$40,000 = \$400;$$

$$\$740 + \$400 = \$1,140; \$1,140 \times 12 = \$13,680;$$

$$\$13,680 - \$12,000 = \$1,680; \$1,680 \div \$12,000 = 14\%.$$

$$2-3. \$425 \times 12 = \$5,100; \$1,045 + \$1,025 = \$2,070;$$

$$\$5,100 - \$2,070 = \$3,030; \$3,030 \div \$35,000 = 8.7\%.$$

$$2-4. \$60,000 - \$30,000 = \$30,000; 4 \times \$180 = \$720;$$

$$\$30,000 \times 8\frac{1}{2}\% = \$2,550; \$45,000 \times 2\frac{1}{2}\% = \$1,125;$$

$$\$2,550 + \$1,125 + \$2,500 = \$6,175;$$

$$12 \times \$720 = \$8,640; \$8,640 - \$6,175 = \$2,465;$$

$$\$2,465 \div \$30,000 = 8.2\%.$$

Part 38a - Review Assignment 38a.

$$1. a. \$49.70 \text{ is } 40\% \text{ more than } \$35.50.$$

$$b. \$30.08 \text{ is } 37\frac{1}{2}\% \text{ less than } \$48.00.$$

$$c. 15\frac{3}{4} \div 10\frac{1}{2} = \frac{63}{8} \div \frac{21}{4} = \frac{63}{8} \times \frac{4}{21} = \frac{3}{2} = 1\frac{1}{2}$$

$$2. \$580 \times 9\frac{1}{2}\% (\$55.10) \text{ for 90 days} = \$13.78.$$

Section 38.

Unit 8.

Review Assignment 38a-Part 38b.

Exercises 3-7 (for Review Assignment 38a),
and Exercise 3 (for Part 38b).

233

3. $\$46,000 - \$10,000 = \$36,000$; 9% of $\$36,000 = \$3,240$;
 2% of $\$36,000 = \720 ; $\$1,250 + \$210 + \$430 + \$720 + \$3,240$
 $= \$5,850$; $12 \times \$575 = \$6,900$; $\$6,900 - \$5,850 = \$1,050$;
 $\$1,050 \div \$36,000 = 2.9\%$.

4. $60 \times \$38.50 = \$2,310$; $\$2,310.00 + \$40.03 = \$2,350.03$.

5. $\$100 \times 7\% = \7 ; $\$7 \div \$125 = 5.6\%$.

6. 25% of $\$1,200 = \300 ; $\$1,200 - \$300 = \$900$;
 $\$900.00 \div \$37.50 = 24$.

7. $\$150 \div .05 = \$3,000$;
 $\$240 - \$150 = \$90$;
 $\$3,000 + \$3,000 = \$6,000$.

3-1.	Cash Investment	Desired Annual Net Income	Annual Expenses	Monthly Rent
a.	\$20,000	9% of investment	\$1,320	\$260
b.	25,000	8% of investment	1,720	310
c.	34,000	8½% of investment	2,510	450
d.	42,500	7% of investment	3,025	500
e.	62,500	10% of investment	4,250	875

3-2. 8% of $\$34,000 = \$2,720$;
 $\$2,720 + \$1,480 = \$4,200$; $\$4,200 \div 12 = \350 ;
 $\$350 \div 2 = \175 .

3-3. 9% of $\$58,000 = \$5,220$; 2% of $\$58,000 = \$1,160$;
 $\$430 + \$448 + \$62 + \$1,160 + \$5,220 = \$7,320$;
 $\$7,320 \div 12 = \610 .

Unit 8.

Section 38.

Part 38b - Review Assignment 38b.

Exercise 3 (for Part 38b),

and Exercises 1-6 (for Review Assignment 38b).

234

Exercise 3
(continued)

3-4. 9% of $\$40,000 = \$3,600$; $\$3,600 + \$6,040 = \$9,640$;
 10% of $\$80,400 = \$8,040$; $\$8,040 + \$9,640 = \$17,680$;
 $\$17,680 \div 4 = \$4,420$; $\$4,420 \div 12 = \368.33 .

Review Assignment
38b.

1. a. $\$90$ is 250% of $\$36$.

b. $\$96$ is 28% more than $\$75$.

c. 75% of $\$12,600$ is $\$9,450$.

d. $\$18.80$ decreased by $37\frac{1}{2}\%$ of itself gives $\$11.75$.

e. $\$630 \times 7\frac{1}{2}\%$ ($\$47.25$) for 30 days = $\$3.94$.

2. 9% of $\$54,000 = \$4,860$; 2% of $\$54,000 = \$1,080$;
 $\$4,860 \div 5 = \972 ; $\$1,080 + \$326 + \$850 = \$2,256$;
 $\$2,256 \div 12 = \188 .

3. $\$40,000 - \$8,000 = \$32,000$; 10% of $\$32,000 = \$3,200$;
 $\$580 \times 12 = \$6,960$; 4% of $\$32,000 = \$1,280$;
 $\$6,960 + \$1,280 + \$1,280 + \$230 = \$9,750$;
 $\$9,750 - \$6,960 = \$2,790$; $\$2,790 \div \$32,000 = 8.8\%$.

4. $4 \times \$1.15 = \4.60 ; $\$4.60 \div \$55.00 = 8.4\%$.

5. $\$76.25 \times 60 = \$4,575$; $\$61.18 + \$3.10 = \$64.28$;
 $\$4,575.00 - \$64.28 = \$4,510.72$.

6. $\$1,000 \times 6\frac{1}{2}\% = \65 ; $\$3,900 \div \$65 = 60$.

Section 38.

Unit 8.

Part 38c - Review Assignment 38c.

Exercises 4-5 (for Part 38c),

and Exercises 1-2 (for Review Assignment 38c).

235

$$4-1. \$3,920 \div 8\% = \$49,000.$$

$$4-2. \$3,780 \div 9\% = \$42,000.$$

$$4-3. \$4,740 + \$1,950 = \$6,690;$$

$$\$6,690 \div 10\% = \$66,900.$$

$$4-4. \$1,540 + \$7,840 = \$9,380;$$

$$\$9,380 \div 9\frac{1}{2}\% = \$98,736.84$$

$$4-5. \$320 + \$1,732 = \$2,052;$$

$$\$2,052 \div 8\frac{1}{2}\% = \$24,141.18.$$

$$5-1. \$600 \times 12 = \$7,200; \$1,820 + \$730 = \$2,550;$$

$$\$7,200 - \$2,550 = \$4,650; \$41,000 + \$3,000 = \$44,000;$$

$$\$4,650 \div \$44,000 = 10.6\%.$$

$$5-2. \$32,000 + \$4,000 = \$36,000;$$

$$\$36,000 + \$2,520 = \$38,520; 9\% \text{ of } \$38,520 = \$3,466.80$$

$$\$3,466.80 \div 12 = \$288.90.$$

$$5-3. 12 \times \$315 = \$3,780; \$3,780 \times 2 = \$7,560;$$

$$\$2,000 + \$3,820 = \$5,820; \$5,820 + \$45,000 = \$50,820;$$

$$\$50,820 + \$7,560 = \$58,380; 8\% \text{ of } \$58,380 = \$4,670.40.$$

1. capital investment: (b) Original investment plus improvements and additions.
depreciation: (a) Loss of value caused by wear and tear.

2. a. 120% of \$45 is \$54.
b. \$56 increased by 45% of itself gives \$81.20.

236.

Review Assignment
38c (continued).
Exercise 2
(continued).

$$c. \$400 \times 8\% (\$32) \text{ for 75 days} = \$6.67.$$

$$d. \$650 \times 10\% (\$65) \text{ for 135 days} = \$24.38.$$

$$e. \begin{array}{r} 3 \text{ m} = 3.000 \text{ m} \\ - 75 \text{ mm} = - .075 \text{ m} \\ \hline 2.925 \text{ m} \end{array}$$

$$3. 7\frac{1}{2}\% \text{ of } \$50,000 = \$3,750;$$

$$\$3,750 + \$1,320 + \$1,530 + \$300 = \$6,900;$$

$$\$6,900 \div 12 = \$575.$$

$$4. \$380 - \$30 = \$350; 8\% \text{ of } \$350 = \$28;$$

$$\$350 + \$6 + \$6 = \$384; \$384 \div 12 = \$32.$$

$$5. 6\% \text{ of } \$500 = \$30; \$30 \div \$400 = 7.5\%.$$

$$6. \$50,000 - \$10,000 = \$40,000; 9\% \text{ of } \$40,000 = \$3,600;$$

$$\$780 \times 12 = \$9,360; \$1,600 + \$1,200 + \$460 + \$240$$

$$+ \$300 + \$1,000 = \$4,800; \$4,800 + \$3,600 = \$8,400;$$

$$\$9,360 - \$8,400 = \$960; \$960 \div \$10,000 = 9.6\%.$$

$$7. \$24.20 \times 18 = \$435.60; \$435.60 - \$360.00 = \$75.60;$$

$$\frac{\$75.60 \times 100}{\$360.00} = \frac{\$7,560}{\$360} = \$21.00 = 25\%.$$

$$8. 0.012 = \frac{12}{1,000} = \frac{3}{250}$$

$$9. \$6,790 + \$3,350 = \$10,140;$$

$$\$10,140 \div 8\% = \$126,750.$$

Section 38.
General Review:
Exercises 1-3.

Unit 8.

237

1. a. $6\frac{1}{4} = 6\frac{15}{60}$ b. $238\frac{1}{3} = 238\frac{8}{24}$
 $4\frac{1}{3} = 4\frac{20}{60}$ $- 138\frac{2}{8} = - 138\frac{21}{24}$
 $+ 9\frac{1}{5} = + 9\frac{12}{60}$ $99\frac{11}{24}$
 $19\frac{57}{60} = 19\frac{19}{20}$

c. $24\frac{1}{3} \times 12\frac{1}{2} = \frac{73}{3} \times \frac{25}{2} = \frac{1,825}{6} = 304\frac{1}{6}$

d. $36\frac{1}{4} \div \frac{1}{2} = 36\frac{1}{4} \times 2 = 72\frac{1}{2}$

e. 0.870
 $\times 0.759$
 27830
 4350
 6090
 $.660330$

f. $\frac{1}{4}\%$ of $\$596 = \1.49

g. $\frac{7}{17} = .41\%$

h. $\$182$ is 35% of $\$520$.

2.

Steve Barber Reconciliation Statement May 31, 1981	
Checkbook balance: $\$483.17$	Bank statement balance: $\$540.14$
Less:	Less outstanding checks:
Service charge <u>1.55</u>	#373 $\$10.18$
	#374 31.12
	#375 17.22 <u>58.52</u>
Correct checkbook balance: $\$481.62$	Available bank balance: $\$481.62$

3. $\$5.173 = \5.17

$37.5 \overline{) \$193.5000}$
 1875
 650
 375
 2750
 2625
 1250
 1125
 125

Section 38.
General Review.
Exercises 9-13.

Unit 8.

239

9. 9% of $\$750 = \67.50 ;
 $\$750.00 - \$67.50 = \$682.50$;
 $\$682.50 \div 24 = \28.44 ; (b)
 $\$28.44 = 25\frac{1}{2}\%$.
 (a)

10. $\$4.75 \times 16 = \76.00 ;
 $\$76.00 + \$11.20 = \$87.20$;
 $\$87.20 - \$80.00 = \$7.20$; 9% .

11. In Account with Margaret Crest

Date	Withdrawal	Deposit	Interest	Balance
¹⁹⁸¹ Apr. 1		$\$840.00$		$\$840.00$
July 1			$\$12.60$	852.60
Oct. 1			12.79	865.39
¹⁹⁸² Jan. 2			12.98	878.37
Apr. 1			13.18	891.55

6% interest per year

12. May 10 to July 9: 60 days
 9% of $\$550 = \49.50 ; $\$550.00 + \$49.50 = \$599.50$.

13. $\$1.75 \times 8 = \14.00 ; $\$14.00 \times 30 = \420.00 ;
 $\$420.00 + \$2,669.50 = \$3,089.50$;
 $\$3,089.50 - \$2,429.00 = \$660.50$.

Unit 8.

Section 38.

General Review:

Exercises 14-15.

240

General Review
(continued).

14.

James Wheeler
Reconciliation Statement
December 31, 1980

Checkbook balance: \$742.61	Bank statement balance: \$766.04
Less:	Less outstanding checks:
Service charge \$2.18	#40 \$121.06
Amount on check	#41 49.55 170.61
still (too small) 10.00 12.18	Sub-total: \$595.43
Correct checkbook balance: \$730.43	Add: Deposit not recorded 135.00
	Available bank balance: 730.43

15.

An account with L. J. Clark

Date	Withdrawal	Deposit	Interest	Balance
1981 Jan. 2		\$ 800.00		\$ 800.00
Apr. 1			\$ 10.00	810.00
July 1		400.00	15.13	1,225.13
Oct. 1			15.31	1,240.44

5% interest per year

Section 39.
Part 39a.
Exercises 1-2.

Unit 9.

Unit 9, Section 39.

241

1-1. $5\frac{1}{2}\%$ of $\$32,000 = \$1,760$;
 $\$1,760 + \$2,440 = \$4,200$;
 $\$4,200 \div 12 = \350 .

1-2. 6% of $\$29,500 = \$1,770$;
 $\$510 + \$280 + \$190 + \$550 = \$1,530$.
 $\$1,770 + \$1,530 = \$3,300$; $\$300 \times 12 = \$3,600$
 $\$3,600 - \$3,300 = \$300$.

1-3. $\$29,000 - \$9,000 = \$20,000$;
 $9\frac{1}{2}\%$ of $\$20,000 = \$1,900$; $\$770 + \$120 + \$580$
 $+ \$600 = \$2,070$; $\$2,070 + \$1,900 = \$3,970$;
 6% of $\$9,000 = \540 ; $\$3,970 + \$540 = \$4,510$.

1-4. $\$31,000 - \$9,000 = \$22,000$;
 11% of $\$22,000 = \$2,420$; $\$980 + \$230 + \$650$
 $+ \$800 = \$2,660$; $\$2,660 + \$2,420 = \$5,080$;
a. 6% of $\$22,000 = \$1,320$; $\$5,080 + \$1,320 = \$6,400$.
b. To buy the house.
c. $\$6,600 - \$6,400 = \$200$.

1-5. 6% of $\$56,000 = \$3,360$;
 $\$3,360 + \$5,100 = \$8,460$; $\$750 \times 12 = \$9,000$;
 $\$8,460 \div 12 = \705 .

Answers: It would be cheaper to buy the building, by $\$45$ a month.

2-1. $\$2,600 + \$52 + \$85 = \$2,737$.

Unit 9.

Section 39.

Part 39a - Review Assignment 39a.

Exercise 2 (for Part 39a),

and Exercise 1 (for Review Assignment 39a).

242

Exercise 2
(continued).

$$2-2. \$45 \times 75 = \$3,375; \$3,375 + \$210 = \$3,585.$$

$$2-3. 20\% \text{ of } \$46,573.80 = \$9,314.76;$$

$$\$46,573.80 + \$9,314.76 = \$55,888.56.$$

$$2-4. \begin{array}{r} \$4,500 \\ 11,100 \\ 8,400 \\ 14,700 \\ + 1,050 \\ \hline \$39,750 \end{array} \quad \begin{array}{r} \$39,750 \\ - 37,500 \\ \hline \$2,250 = 6\%. \end{array}$$

$$2-5. 30\% \text{ of } \$24,700 = \$7,410;$$

$$\$7,410 + \$110 + \$75 + \$125 = \$7,720.$$

$$2-6. a. 20\% \text{ of } \$51,750 = \$10,350;$$

$$\$51,750 + \$10,350 = \$62,100;$$

$$\$62,100 + \$650 = \$62,750.$$

$$b. \$5,000 + \$1,600 = \$6,600.$$

$$c. \$62,750 + \$6,600 = \$69,350.$$

Review Assignment 39a.

$$1. a. \begin{array}{r} \$16,000 \\ \times 0.25364 \\ \hline \$4,058.24 \end{array}$$

$$= \$4,058.24$$

$$b. \begin{array}{r} .0045 \\ 14,000 \overline{) 63.0000} \\ \underline{56000} \\ 70000 \\ \underline{70000} \\ 0 \end{array}$$

$$c. \$24.75 \text{ is } 10\% \text{ greater than } \$24.50.$$

Section 39.

Unit 9.

Review Assignment 39a - Part 39b.

Exercises 2-7 (for Review Assignment 39a),
and Exercise 3 (for Part 39b).

243

$$2. \$450 \times 12 = \$5,400; 6\% \text{ of } \$40,000 = \$2,400;$$
$$\$2,400 + \$2,950 = \$5,350; \$5,400 - \$5,350 = \$50.$$

$$3. \$27,000 + \$1,650 = \$28,650;$$
$$99\% \text{ of } \$28,650 = \$2,578.50; \$2,578.50 \div 12 = \$214.88.$$

$$4. 80 \times \$54.25 = \$4,340;$$
$$\$4,340.00 + \$59.06 = \$4,399.06.$$

$$5. 4 \times \$.62\frac{1}{2} = \$2.50;$$
$$\$2.50 \times 80 = \$200.00.$$

$$6. \$100 \times 4\frac{1}{2}\% = \$4.50;$$
$$\$4.50 \div \$75 = 6\%.$$

$$7. 2 \times \$2.75 = \$5.50;$$
$$\$5.50 \div \$95 = 5.8\%.$$

3-1. a. $\$180.00.$

b. $20 \times 12 = 240; 240 \times \$180 = \$43,200.$

c. $\$43,200 - \$20,000 = \$23,200.$

d. $\$23,200 \div 240 = \$96.67.$

3-2. a. $\$192.23.$

b. $30 \times 12 = 360; 360 \times \$192.23 = \$69,202.80.$

c. $\$69,202.80 - \$25,000.00 = \$44,202.80.$

d. $\$44,202.80 \div 360 = \$122.79.$

3-3. a. $\$335.69.$

b. $25 \times 12 = 300; 300 \times \$335.69 = \$100,707.$

c. $\$100,707 - \$40,000 = \$60,707.$

d. $\$60,707 \div 300 = \$202.36.$

Unit 9.

Section 39.

Part 39b - Review Assignment 39b.

Exercise 3 (for Part 39b),

and Exercises 1-4 (for Review Assignment 39b).

244

Exercise 3
Continued

3-4. a. $\$347.20$.

b. $20 \times 12 = 240$; $240 \times \$347.20 = \$83,328$.

c. $\$83,328 - \$40,000 = \$43,328$.

d. $\$43,328 \div 240 = \180.53 .

3-5. a. $\$30,000 - \$10,000 = \$20,000$; $\$167.85$.

b. $25 \times 12 = 300$; $300 \times \$167.85 = \$50,355$.

c. $\$50,355 - \$20,000 = \$30,355$.

d. $\$30,355 \div 300 = \101.18 .

Review Assignment
Part 39b.

1. a. 160% of $\$75$ is $\$120$.

b. $\$162$ is 12% of $\$81$.

c. April 2 to July 24: 113 days.

d. $\$2 \times 10\% (\$2.15)$ for 36 days = $\$2.15$.

2. $9\% \text{ of } \$80,000 = \$7,200$;

$\$7,200 + \$2,450 + \$400 + \$3,000 = \$13,050$;

$\$1,000 \times 12 = \$12,000$;

a. To rent the store at $\$1,000$ a month.

b. $\$13,050 - \$12,000 = \$1,050$ (loss).

3. $\$48,000 - \$12,000 = \$36,000$; $9\% \text{ of } \$36,000 = \$3,240$;

$\$250 \times 12 = \$3,000$; $2 \times \$3,000 = \$6,000$;

$\$6,000 - \$4,800 = \$1,200$; $\$1,200 \div \$12,000 = 10\%$.

4. Since late on 60-day note dated May 25: July 24.
 $\$675 \times 5\% (\$33.75)$ for 60 days = $\$5.63$.

Sections 39-40

Review Assignment 39b-Section 40.

Exercises 5-9 (for Review Assignment 39b),
and Exercise 1 (for Section 40).

5. $\$150.00 - \$30.00 = \$120.00;$

$\$10.90 \times 12 = \$130.80.$

a. $\$130.80 - \$120.00 = \$18.00.$

b. $\$130.80.$

c. $\frac{\$18.00 \times 100}{\$120.00} = \frac{\$1,800}{\$120} = \$15.$

d. $26\frac{3}{4}\%.$

6. $3 \times 4 = 12; \$60 \times 12 = \$7.20;$

$\$7.20 \times 30 = \$216.00; \$216 + \$1,286 = \$1,502;$

$\$1,502 - \$1,315 = \$187.$

7. $50\% = 500 \text{ grams}$

$30\% = 300 \text{ grams}$

$20\% = 200 \text{ grams}$

$1000 \text{ grams} = 1 \text{ kilogram}$

8. a. $\$54 \text{ is } \frac{4}{9} \text{ of } \$121.50.$

b. $0.08\frac{3}{4} = \frac{35}{400} = \frac{7}{80}$

c. $\$350 \text{ increased by } \frac{4}{5} \text{ of itself equals } \$630.$

9. $\$6,080 + \$2,960 = \$9,040;$

$\$9,040 \div 7\frac{1}{2}\% = \$120,533.33.$

Section 40.

1.	Assessed Valuation	Tax Rate	Amount of Tax
	\$8,000	\$3.942 per \$100	\$315.36
	3,000	4.226 per \$100	126.78
	9,600	5.325 per \$100	511.20
	10,500	55.45 per \$1,000	582.23
	8,400	35.60 per \$1,000	299.04
	14,500	27.90 per \$1,000	404.55

Unit 9.

Section 40.
Exercises 1-2.

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Exercise 1
(continued)

$$1-2. \$7,800 \div \$100 = 78;$$

$$78 \times \$5.345 = \$416.91.$$

$$1-3. \$13,500 \div \$1,000 = 13.5$$

$$13.5 \times \$42.50 = \$573.75.$$

$$1-4. \$4,500 \div \$100 = 45;$$

$$45 \times \$5.238 = \$235.71.$$

$$1-5. \$75,000 \div \$100 = 750;$$

$$750 \times \$2.6355 = \$1,976.63; 875 \times \$2.6355 = \$2,304.06.$$

$$1-6. \$8,200 + \$16,000 = \$24,200; \$24,200 \div \$100 = 242;$$

$$242 \times \$4.25 = \$1,028.50; 753 \times \$4.25 = \$3,200.25.$$

2-1.	Assessed Value	Tax Rate per \$1	Amount of Tax
a.	\$ 6,800	45 mills	\$ 306.00
b.	27,200	31 mills	843.20
c.	11,400	28.5 mills	324.90
d.	18,500	9.31 mills	1,722.35
e.	8,000	4.15 cents	332.00
f.	7,500	3.45 cents	258.75
g.	12,000	3.25 cents	390.00
h.	6,500	.95 cents	61.75

$$2-2. \$16,400 \times .053 = \$869.20.$$

$$2-3. \$29,500 \times .0345 = \$1,017.75.$$

Section 40 - Review Assignment 40.

Unit 9.

Exercises 2 (for Section 40),
and Exercises 1-4 (for Review Assignment 40).

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2-4. $\$18,000 \times .0523 = \$941.40;$
 $33\frac{1}{2}\% \text{ of } \$941.40 = \$313.80.$

2-5. $\$22,000 + \$8,000 = \$30,000;$
 $\$30,000 \times .0463 = \$13,890;$
 $40\% \text{ of } \$13,890 = \$5,556.$

2-6. $1\% \text{ of } \$546.84 = \$5.47;$
 $\$546.84 + \$5.47 = \$552.31.$

1. amortized: (c) Repaid gradually.
 assessed valuation: (d) Base for real property tax,
 mill: (a) One tenth of a cent.
 property tax: (b) Charged on real estate.

2. a. $\begin{array}{r} \$8,500.00 \\ \times 0.09846 \\ \hline 1'5100000 \\ 3400000 \\ 6800000 \\ 7650000 \\ \hline \$836.9100000 \\ = \$836.91 \end{array}$ b. $\$132 \text{ is } \frac{2}{3} \text{ less than } \$220.$
 c. $\$240 \text{ is } 250\% \text{ of } \$96.$
 d. $500 \text{ mL is } 25\% \text{ of } 2 \text{ L.}$

3. $\$8,200 \div \$1,000 = 8.2;$
 $8.2 \times \$53.221 = \$436.41.$

7. Dealer A: $52 \times \$2.50 = \$130.00;$
 $\$130.00 + \$20.00 = \$150.00.$

Dealer B: $12 \times \$10.00 = \$120.00;$
 $\$120.00 + \$25.00 = \$145.00.$

$\$5.00 \text{ with down payment, } \$10.00 \text{ without down payment.}$

Unit 9.

Sections 40-41.

Review Assignment 40 - Part 41a.

Exercises 5-11 (for Review Assignment 40),
and Exercise 1 (for Part 41a).

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Review Assignment
40 (continued).

5. $\$1,000 \times \$88375 = \$883.75;$

$6 \times \$883.75 = \$5,302.50; 6 \times \$5.00 = \$30.00;$

$\$5,302.50 + \$30.00 = \$5,332.50.$

6. $\$1,000 \times 4\frac{1}{2}\% = \$45; \$45 \div \$600 = 7.5\%.$

7. $\$1,000 \times 5\frac{1}{2}\% = \$55; \$55 \div \$110 =$

8. $12 \times 20 = 240; \$2\% \times 240 = \$64,800;$
 $\$64,800 - \$30,000 = \$34,800.$

9. a. $\$11.42 \times 211 = \$477.60; \$477.60 + \$50.00 = \$527.60;$
 $\$527.60 - \$450.00 = \$77.60.$

b. $\$450.00 - \$50.00 = \$400.00.$

c. $\frac{\$77.60 \times 100}{\$400} = \frac{\$7,760}{\$400} = \$19.40 = 17\frac{3}{4}\%.$

10. $0.13\frac{1}{3} = \frac{13\frac{1}{3}}{100} = \frac{40}{300} = \frac{2}{15}.$

11. $\$1,000 \times 8\% = \$80; \$5,000 \div \$80 = 62.5.$

7.5%: You will actually buy only 62 bonds worth
\$1,000 each, for you will also need an additional
\$500 bond to make the \$5,000 investment.

Section 41.

Part 41a.

1-b.	Face of Bond	Annual Rate	Premium
a.	\$39,000	27	\$105.30
b.	58,000	24	139.20
c.	113,000	31	350.30
d.	17,000	42	71.40
e.	14,500	54	78.30
f.	24,000	66	163.68

Section 41.
Part 41a.
Exercises 1-3.

Unit 9.

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1-2. $\$43,000 \div \$100 = \$430;$
 $\$430 \times \$.35 = \$150.50.$

1-3. $\$18,000 \div \$100 = \$180;$
 $\$180 \times \$.60 = \$108.00.$

1-4. $\$22,500 \div \$100 = \$225;$
 $\$225 \times \$.81 = \$182.25.$

1-5. $\$75,000 \div \$100 = \$750;$
 $\$750 + \$462 + \$20 + \$5 = \$1,237.$

1-6. $\$57,000 \div \$100 = \$570;$
 $\$570 \times \$.32 = \$182.40; \$570 \times \$.17 = \$96.90;$
 $\$182.40 + \$96.90 = \$279.30.$

1-7. $\$30,000 \div \$100 = \$300;$
 $\$300 \times \$.32 = \$96.00; 80\% \text{ of } \$96.00 = \$76.80.$

2-1.	Amount of Policy	Location and Type	Annual Premium	Off-Premises Coverage (10%)	Living Expense Coverage (20%)
2.	\$7,000	Incity-Brick	\$ 57	\$ 700	\$ 1,400
3.	\$10,000	Incity-Wood	79	1,000	2,000
2.	\$8,000	Outside-Brick	75	800	1,600
1.	\$9,000	Outside Wood	86	900	1,800
2.	\$6,000	Incity-Wood	58	600	1,200

3-1. $\$7,500 \div \$100 = \$75;$
 $\$75 \times .64 = \$48; 35\% \text{ of } \$48.00 = \$16.80.$

Unit 9.

Section 41.

Part 41a - Review Assignment 41a.

Exercise 3 (for Part 41a),

and Exercise 1-2 (for Review Assignment 41a).

250

Exercise 3
(continued)

3-2. $\$30,000 \div \$100 = \$300$

$\$300 \times .44 = \132 ; 80% of $\$132.00 = \105.60 .

3-3. $\$12,500 \div \$100 = \$125$

$\$125 \times .80 = \100 ; $100\% - 74\% = 26\%$;

26% of $\$100 = \26 .

3-4. a. $100\% - 40\% = 60\%$; $\$175 \times 60\% = \105 .

b. $\$175 - \$105 = \$70$.

3-5. 1 year = 365 days, $365 - 160 = 205$;

$\frac{205}{365} = \frac{41}{73}$; $\frac{41}{73} \times \$12 = \50.54 ;

$\$90.00 - \$50.54 = \$39.46$.

Review Assignment 41a

1. extended coverage: (a) Adds wind, smoke, and hail coverage to a standard fire policy.

b. covers more than (c) Provides fire and extended coverage, plus theft and liability coverage.

short-term policy: (d) Coverage for less than a year.

standard fire policy: (a) Covers loss by fire and lightning only.

2. a. $\frac{.0086}{95,000} = \frac{817,000}{760,000}$

$\frac{817,000}{760,000}$

$\frac{570}{570}$

$\frac{570}{570}$

b. $\$105$ is $23\frac{2}{9}\%$ less than $\$135$.

c. $\$26.61$ is 25% less than $\$35.48$.

d. $0.75 = \frac{75}{100} = \frac{3}{4}$.

2. $\$988 \times 6\% = \59.28 for

20 days = $\$3.29$.

Section 41.
Review Assignment 41a.
Exercises 3-12.

Unit 9.

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3. $\$35,500 \div \$100 = \$355$;
 $\$355 \times .44 = \156.20 ; 80% of $\$156.20 = \124.96 .

4. $\$45,000 \div \$100 = \$450$;
 $\$450 \times .60 = \270.00 ; 85% of $\$270.00 = \229.50 .

5. $\$44,000 + \$2,160 = \$46,160$;
 9% of $\$46,160 = \$4,154.40$; $\$4,154.40 \div 12 = \346.20 .

6. $\$35,000 \div \$1,000 = \$35.00$;
 $\$35.00 \times \$45.25 = \$1,583.75$; $\$1,583.75 \times 40\% = \633.50 .

7. $1\frac{1}{2}\%$ of $\$784.50 = \11.77 ;
 $\$784.50 + \$11.77 = \$796.27$.

8. $12 \times 25 = 300$;
 $\$234 \times 300 = \$70,200$;
 $\$70,200 - \$20,000 = \$50,200$.

9. $\$450 \times 12 = \$5,400$.
 $\$39,000 \times 7\% = \$2,730$; $\$2,730 + \$3,150 = \$5,880$.
Rent the house; $\$5,880 - \$5,400 = \$480$.

10. a. $\$176$ increased by 25% of itself equals $\$220$.
b. $\$3.75$ decreased by $\frac{2}{3}$ of itself equals $\$2.25$.

11. $\$8,700 + \$4,140 = \$12,840$;
 8% of $\$12,840 = \898.80 .

12. $365 - 180 = 185$; $\frac{185}{365} = \frac{37}{73}$;
 $\frac{37}{73} \times \$140 = \70.96 ;
 $\$140.00 - \$70.96 = \$69.04$.

Unit 9. Section 41.
Part 41b.
Exercises 4-5,

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	Property Insured for	Fire Loss	Amount Paid
4-1.	\$ 16,000	\$ 3,200	\$ 3,200
4-2.	29,500	29,000	29,000
4-3.	8,000	5,000	5,000
4-4.	17,000	19,000	17,000
4-5.	26,000	24,500	24,500
4-6.	5,000	5,800	5,000
4-7.	18,000	13,000	13,000
4-8.	47,500	47,800	47,500

5-1.	Fire Loss	Amount of Insurance Company					
		Heritage Company	Prize	National Company	Shore	United Company	Shore
a.	\$2,000	\$4,500	\$1,200	\$3,000	\$800	None	None
b.	8,000	10,000	5,000	None	None	\$6,000	\$3,000
c.	3,200	6,000	2,560	1,500	640	None	None
d.	5,400	5,000	900	15,000	2,700	10,000	1,800
e.	4,500	20,000	2,000	10,000	1,000	15,000	1,500
f.	1,500	3,000	300	7,500	750	4,500	450

5-2. $\$28,000 + \$20,000 = \$48,000;$

$\$20,000 \div \$48,000 = 0.42; 0.42 \times \$18,000 = \$7,500.$

$\$28,000 \div \$48,000 = 0.58; 0.58 \times \$18,000 = \$10,500.$

Fidelity Insurance Company: \$10,500.

Heritage Insurance Company: \$7,500.

Section 41.

Unit 9.

Part 41 b.

Exercise 556

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$$5-3. \$20,000 + \$15,000 + \$10,000 = \$45,000;$$

$$\$20,000 \div \$45,000 = 0.44; 0.44 \times \$9,450 = \$4,200.$$

$$\$15,000 \div \$45,000 = 0.33; 0.33 \times \$9,450 = \$3,150.$$

$$\$10,000 \div \$45,000 = 0.22; 0.22 \times \$9,450 = \$2,100.$$

Liberty Insurance Company: \$4,200.

Mutual Underwriters Company: \$3,150.

Ohio Casualty Insurance Company: \$2,150.

$$5-4. \$8,000 + \$24,000 + \$32,000 = \$64,000;$$

$$\$8,000 \div \$64,000 = 0.125; 0.125 \times \$26,000 = \$3,250.$$

$$\$24,000 \div \$64,000 = 0.375; 0.375 \times \$26,000 = \$9,750.$$

$$\$32,000 \div \$64,000 = 0.5; 0.5 \times \$26,000 = \$13,000.$$

Company A: \$3,250.

Company B: \$9,750.

Company C: \$13,000.

$$5-5. \$16,000 + \$14,000 + \$10,000 = \$40,000;$$

$$\$16,000 \div \$40,000 = 0.4; 0.4 \times \$12,000 = \$4,800.$$

$$\$14,000 \div \$40,000 = 0.35; 0.35 \times \$12,000 = \$4,200.$$

$$\$10,000 \div \$40,000 = 0.25; 0.25 \times \$12,000 = \$3,000.$$

Empire Company: \$4,800.

Superior Company: \$4,200.

Freedom Company: \$3,000.

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G-1.	Face of Policy	Amount of Loss	Value of Property	Coinsurance Clause	Amount Paid
a.	\$ 28,000	\$ 6,400	\$ 40,000	80%	\$ 5,600
b.	15,000	4,000	25,000	80%	3,000
c.	20,000	7,800	30,000	80%	6,500
d.	9,000	3,000	12,500	80%	2,700
e.	14,000	13,500	20,000	90%	10,500
f.	7,200	5,600	9,000	80%	5,600
g.	26,000	28,000	30,000	80%	30,333
h.	52,000	25,000	50,000	90%	22,800

6-2. 80% of \$20,000 = \$16,000;

\$12,000 ÷ \$16,000 = 0.75;

0.75 × \$8,000 = \$6,000.

6-3. 80% of \$25,000 = \$20,000;

\$10,000 ÷ \$20,000 = 0.5;

0.5 × \$7,200 = \$3,600.

6-4. 80% of \$30,000 = \$24,000;

\$21,000 ÷ \$24,000 = 0.875;

0.875 × \$10,000 = \$8,750.

Review Assignment 41b:

1. a. \$325 is $\frac{3}{10}$ greater than \$250.

b. \$54.24 - 25% of itself =
\$54.24 - \$13.56 = \$40.68.

c. March 25 to June 8: 75 days.

d. \$372.15 × 7% (\$26.05) for 40 days
= \$2.89.

e. $112\frac{1}{2}\%$ of \$64 is \$72.

Section 41.
Review Assignment 41b,
Exercises 2-9.

Unit 9.

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2. $\$12,000 + \$18,000 = \$30,000$;

$\$12,000 \div \$30,000 = 0.4$; $0.4 \times \$3,200 = \$1,280$.

$\$18,000 \div \$30,000 = 0.6$; $0.6 \times \$3,200 = \$1,920$.

American Insurance Company: $\$1,280$.

Globe Insurance Company: $\$1,920$.

3. $\$25,000 \div \$1,000 = \$25$;

$\$25 \times \$51.50 = \$1,287.50$; $60\% \text{ of } \$1,287.50 = \77.25 .

4. $7\% \text{ of } \$100 = \7.00 ;

$\$7.00 \div \$110 = 6.3\%$.

5. $\$50.00 \times 5\% = \2.50 ;

$\$2.50 \div \$41.00 = 6.1\%$.

6. $4 \times \$0.45 = \1.80 ; $\$1.80 \times 80 = \144.00 ;

$\$144 + \$4,760 = \$4,904$; $\$4,904 - \$4,200 = \$704$.

7. April 18 to July 2: 75 days.

$\$1,280 \times 9\% (\$115.20) \text{ for } 75 \text{ days} = \24.00 .

8. $\$12.75 \times 12 = \153.00 ; $\$153.00 + \$17.50 = \$170.50$.

$\$3.25 \times 52 = \169.00 ; $\$169.00 + \$6.50 = \$175.50$.

$\$175.50 - \$170.50 = \$5.00 \text{ (Dealer A)}$.

9. $\$17.75 \times 18 = \319.50 ; $\$319.50 + \$35.00 = \$354.50$.

$\$354.50 - \$315.00 = \$39.00$; $\$315.00 - \$35.00 = \$280.00$.

$\frac{\$39.00 \times 100}{\$280} = \frac{\$3,900}{\$280} = \$13.93 = 17\%$.

Unit 9.

Sections 41-42.

Review Assignment 41b - Part 42a.

Exercises 10-11 (for Review Assignment 41b),
2nd Exercise 1 (for Part 42a).

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Review Assignment 41b (continued)

10. $50 \text{ liters} + 138 \text{ liters} = 188 \text{ liters}$

$188 \text{ liters} - 16 \text{ liters} = 172 \text{ liters}$

11. $80\% \text{ of } \$30,000 = \$24,000;$

$\$18,000 \div \$24,000 = 0.75;$

$0.75 \times \$2,200 = \$1,650.$

Section 42

Part 42a.

Line	User	Mat. Readings		L.H.	Tot. \$	Total \$
		7-11-5	12-13-5	14-15		
a.	W. H.	451	968	457	\$14.4	\$14.52
b.	J. H.	761	975	22	8.10	8.26
c.	L. H.	124	785	661	27.86	25.36
d.	L. H.	1,342	2,144	850	30.22	30.60
e.	R. H.	662	2,818	1,136	36.45	37.2

1-2. $6,602 - 6,527 = 165$

$165 \times \$0.393 = \6.48

$3\% \text{ of } \$6.48 = \$0.19; \$6.48 + \$0.19 = \$6.67$

1-3. $9,206 - 8,668 = 538;$

$538 \times \$0.0393 = \$21.14;$

$7\% \text{ of } \$21.14 = \$1.48; \$1.48 + \$21.14 = \$22.62$

1-4. $4,922 - 2,560 = 1,442; 1,442 - 550 = 892;$

$892 - 275 = 617; 550 \times \$0.0393 = \$21.62;$

$275 \times \$0.0218 = \$8.06; 617 \times \$0.0218 = \$13.45;$

$\$21.62 + \$8.06 + \$13.45 = \$43.13;$

$4\% \text{ of } \$43.13 = \$1.73; \$1.73 + \$43.13 = \$44.86.$

Section 42.

Unit 9.

Part 42a- Review Assignment 42a.

Exercises 2 (for Part 42a),

and Exercises 1-2 (for Review Assignment 42a).

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2-1.	Appliance	Rating	Hours in Operation	Kilowatt-Hours
a.	Light bulb	75 watts	130	9.75
b.	Toaster	800 watts	$5\frac{1}{2}$	4.4
c.	Heater	1,600 watts	7	11.2
d.	Electric Motor	3 HP	4	8.952
e.	Power Saw	$\frac{1}{2}$ HP	6	2.238
f.	Vacuum cleaner	$1\frac{1}{2}$ HP	8	8.952

2-2. a. $24 \times 365 = 8,760$;

$2 \times 8,760 = 17,520$; $17,520 \div 1,000 = 17.52$;

$17.52 \times \$.04 = \$.70$.

b. $4 \times 31 = 124$;

$250 \times 124 = 31,000$; $31,000 \div 1,000 = 31$;

$31 \times \$.04\frac{1}{2} = \$ 1.40$.

c. $\frac{1}{2} \times 746 = 373$; $12 \times 30 = 360$;

$360 \times 373 = 134,280$; $134,280 \div 1,000 = 134.28$;

$134.28 \times \$.03\frac{1}{2} = \$ 4.70$.

1. a. $1\frac{1}{2} = 1.5$.

b. \$200 is $\frac{3}{8}$ smaller than \$320.

c. \$196.50 minus $66\frac{2}{3}\%$ of itself leaves \$65.50.

d. $\$ 3,000 \times 9\frac{1}{2}\%$ (\$285) for 120 days = \$95.

e. 6 kg is 300% of 2 kg.

2. $8,712 - 8,154 = 558$; $558 - 20 = 538$;

$538 - 50 = 488$. $20 \times \$.05 = \$ 1.00$;

$50 \times \$.03\frac{1}{2} = \$ 1.75$; $488 \times \$.02 = \$ 9.76$.

$\$ 1.00 + \$ 1.75 + \$ 9.76 = \$ 12.51$.

Unit 9.

Section 42.

Review Assignment 42a.
Exercises 3-8.

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Review Assignment 42a (continued)

$$3. \quad 4 \times \$1.80 = \$7.20;$$

$$\$7.20 \div \$90 = 8\%.$$

$$4. \quad \$130 \times 12 = \$1,560; \$1,560 + \$700 = \$2,260.$$

$$\$2,260 - \$2,100 = \$160; \$2,100 - \$700 = \$1,400.$$

$$\$1,400 \times 9\% = \$126; \$1,400 + \$126 = \$1,526.$$

$$\$1,560 - \$1,526 = \$34.$$

$$5. \quad \$40,000 - \$8,000 = \$32,000;$$

$$10\% \text{ of } \$32,000 = \$3,200; 12 \times \$520 = \$6,240;$$

$$\$6,240 + \$2,400 = \$8,640; \$8,640 - \$8,000 = \$640;$$

$$\$640 \div \$8,000 = 8\%.$$

$$6. \quad \$16,000 + \$12,000 + \$6,000 = \$34,000,$$

$$\$16,000 \div \$34,000 = 0.4; 0.4 \times \$3,240 = \$1,296.$$

$$\$12,000 \div \$34,000 = 0.35; 0.35 \times \$3,240 = \$1,134.$$

$$\$6,000 \div \$34,000 = 0.18; 0.18 \times \$3,240 = \$583.20.$$

Allied Co.: \$1,296.
Lincoln Co.: \$1,134.
United Co.: \$583.20.

$$7. \quad a. \quad 0.11\frac{2}{3} = \frac{35}{100} = \frac{7}{20}.$$

$$b. \quad \frac{7}{8}\% = .00875.$$

$$8. \quad 80\% \text{ of } \$50,000 = \$40,000;$$

$$\$30,000 \div \$50,000 = 0.6;$$

$$0.6 \times \$6,400 = \$3,840.$$

Section 42,

Part 42b - Review Assignment 42b.

Exercise 3 (for Part 42b),
and Exercise 1 (for Review Assignment 42b).

Unit 9.

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3-1.	User	Meter Readings		Cubic Feet of Gas Used	Net Bill	Total Bill
		Present	Prior			
a.	E. Jensen	409	383	2,600	\$ 7.85	\$ 8.01
b.	E. Stevens	637	625	1,200	3.88	3.96
c.	L. Stiles	885	860	2,500	7.57	7.72
d.	M. Zamora	290	233	5,700	15.67	15.98
e.	V. Little	140	58	8,200	18.77	19.15

3-2. $366 - 321 = 45$; $45 - 4 = 41$; $41 - 26 = 15$.
 $4 \times \$.4013 = \$ 1.61$; $26 \times \$.2838 = \$ 7.38$;
 $15 \times \$.1882 = \$ 2.82$; $\$ 1.61 + \$ 7.38 + \$ 2.82 = \$ 11.81$;
 $\$ 11.81 \times 5\% = \$.59$; $\$.59 + \$ 11.81 = \$ 12.40$.

3-3. $48,600 - 43,700 = 4,900$; $4,900 - 400 = 4,500$;
 $4,500 - 2,600 = 1,900$. $4 \times \$.4013 = \$ 1.61$;
 $26 \times \$.2838 = \$ 7.38$; $19 \times \$.1882 = \$ 3.58$;
 $\$ 1.61 + \$ 7.38 + \$ 3.58 = \$ 12.57$;
 $\$ 12.57 \times 3\% = \$.38$; $\$.38 + \$ 12.57 = \$ 12.95$.

3-4. $\$ 14.25 - \$.55 = \$ 13.70$;
 $4 \times \$.4013 = \$ 1.61$; $26 \times \$.2838 = \$ 7.38$;
 $\$ 1.61 + \$ 7.38 = \$ 8.99$; $\$ 13.70 - \$ 8.99 = \$ 4.71$;
 $\$ 4.71 \div \$.1882 = 25$; $4 + 26 + 25 = 55$.

3-5. $\$ 12.05 - 2\% (\$.24) = \$ 11.81$;
 $4 \times \$.4013 = \$ 1.61$; $26 \times \$.2838 = \$ 7.38$;
 $\$ 1.61 + \$ 7.38 = \$ 8.99$; $\$ 11.81 - \$ 8.99 = \$ 2.82$;
 $\$ 2.82 \div \$.1882 = 15$; $4 + 26 + 15 = 45$.

1. a. $2\frac{1}{4} = 2.25$.
 b. $\$ 320$ is 60% greater than $\$ 200$.

Unit 9.

Section 42.

Review Assignment 42b.

Exercises 1-7.

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Review Assignment 42b
Exercises 1-7c. \$23.70 is $23\frac{1}{3}\%$ larger than \$16.20.

d. \$28.50 is 150% of \$19.00.

e. $\$22.00 \times 6\%$ (\$13.44) for 100 days = \$4.71.2. $\$2.00 \times 5 = \10.00 ; $\$.25 \times 20 = \5.00 ; $\$.120 \times 23 = \4.60 ; $\$10.00 + \$5.00 + \$4.60 = \23.60 ; $\$23.60 \times 6\% = \1.42 ; $\$23.60 + \$1.42 = \$25.02$.3. $10,032 \text{ KWH} - 9,758 \text{ KWH} = 274 \text{ KWH}$; $274 \text{ KWH} \times \$.03\frac{1}{2} = \9.59 .4. 80% of $\$30,000 = \$24,000$; $\$24,000 \div \$100 = \$240$; $\$240 \times \$.63 = \$151.20$.5. $\$28,000 \times 45\% = \$12,600$; $\$12,600 \div \$1,000 = \$12.60$; $\$12.60 \times \$62.122 = \$782.74$.6. $\$25,500 \times 8\% = \$2,040$; $\$2,040 + \$935 = \$2,975$; $\$265 \times 12 = \$3,180$; $\$3,180 - \$2,975 = \$205$;

Buy the house; \$205.

7.

In Account with: Sample Savings

Date	Withdrawal	Deposit	Interest	Balance
1981 July 1		\$1,600.00		\$1,600.00
Oct. 1			\$20.00	1,620.00
1982 Jan. 2			20.25	1,640.25
Apr. 1			20.50	1,660.75

5% interest a year

Sections 42-43.

Review Assignment 42b--Section 43.

Exercises 8-10 (for Review Assignment 42b),
and Exercise 1 (for Section 43).

$$8. \quad \$3.50 \div 1.5 \text{ kilograms} = \$2.33.$$

$$\$3.50 \div 2 \text{ kilograms} = \$1.75.$$

$$2 \div 15 = 1.33\frac{1}{3}; \quad 1.33\frac{1}{3} = 133\frac{1}{3}\%.$$

$$9. \quad a. \quad \$2.28 \text{ is } \frac{3}{4} \text{ of } \$3.04.$$

$$b. \quad 0.04 \frac{4}{5} = \frac{4 \cancel{4}}{100} = \frac{24}{500} = \frac{6}{125}.$$

$$c. \quad \$216 \text{ is } 225\% \text{ greater than } \$96.$$

$$10. \quad \$14,400 + \$6,900 = \$21,300;$$

$$\$21,300 \div 7\frac{1}{2}\% = \$284,000.$$

Section 43.

$$1-1. \quad a. \quad 2,800 \text{ cu. ft.} : 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft.} @ 95¢ = \$11.40; \quad 1,450 \text{ cu. ft.} @ 80¢$$

$$= \$11.60; \quad \$1.25 + \$11.40 + \$11.60 = \$24.25.$$

$$b. \quad 100 \text{ cu. ft.} : \$1.25.$$

$$c. \quad 4,800 \text{ cu. ft.} : 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft.} @ 95¢ = \$11.40; \quad 3,450 \text{ cu. ft.} @ 80¢$$

$$= \$27.60; \quad \$1.25 + \$11.40 + \$27.60 = \$40.25.$$

$$2. \quad a. \quad 9,290 - 6,940 = 2,300; \quad 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft.} @ 95¢ = \$11.40; \quad 950 \text{ cu. ft.} @ \$1.80$$

$$= \$7.60; \quad \$1.25 + \$11.40 + \$7.60 = \$20.25.$$

$$b. \quad 48,080 - 43,260 = 4,820; \quad 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft.} @ 95¢ = \$11.40; \quad 3,470 \text{ cu. ft.} @ 80¢$$

$$= \$27.76; \quad \$1.25 + \$11.40 + \$27.76 = \$40.41.$$

$$c. \quad 29,740 - 28,370 = 1,370; \quad 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft.} @ 95¢ = \$11.40; \quad 20 \text{ cu. ft.} @ 80¢$$

$$= \$.16; \quad \$1.25 + \$11.40 + \$.16 = \$12.81.$$

Unit 9.

Section 43- Review Assignment 43.

Exercise 1 (for Section 43)

and Exercises 1-5 (for Review Assignment 43).

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Exercise
(continued).

$$1-3. 25,112 - 24,742 = 376; 150 \text{ cu. ft.} = \$1.25;$$

$$276 \text{ cu. ft. @ } 95¢ = \$2.62; \$1.25 + \$2.62 = \$3.87.$$

$$1-4. 55,621 - 35,469 = 20,140; 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft. @ } 95¢ = \$11.40; 5,000 \text{ cu. ft. @ } 80¢$$

$$= \$40.00; 13,790 \text{ cu. ft. @ } 65¢ = \$89.64;$$

$$\$1.25 + \$11.40 + \$40.00 + \$89.64 = \$142.285 = \$142.29.$$

Review Assignment
43.

$$1. a. \begin{array}{r} \$14,200 \\ \times 0.0415 \\ \hline 71000 \\ 14200 \\ \hline 56800 \\ \$589,900 \\ = \$589.30 \end{array}$$

$$b. \$105 \text{ is } 12\frac{1}{2}\% \text{ less than } \$120.$$

$$c. \frac{1}{\frac{4}{5}} = 1.75.$$

$$d. \$516 \times 5\% (\$25.80) \text{ for 30 days} = \$2.15.$$

$$e. 18\text{m}^2 \text{ is } 150\% \text{ greater than } 12\text{m}^2.$$

$$2. 96,010 - 92,364 = 3,646; 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft. @ } 95¢ = \$11.40; 2,296 \text{ cu. ft. @ } 80¢$$

$$= \$18.37; \$1.25 + \$11.40 + \$18.37 = \$31.02.$$

$$3. 42,400 - 37,600 = 4,800; 150 \text{ cu. ft.} = \$1.25;$$

$$1,200 \text{ cu. ft. @ } 95¢ = \$11.40; 3,450 \text{ cu. ft. @ } 80¢$$

$$= \$27.60; \$1.25 + \$11.40 + \$27.60 = \$40.25.$$

$$4. \$6,450 \div \$1,000 = \$6.45;$$

$$\$6.45 \times 27.5 = \$177.38.$$

$$5. 80\% \text{ off } \$42,500 = \$34,000;$$

$$\$34,000 \div \$100 = \$340;$$

$$\$340 \times \$1.35 = \$119.$$

Section 43.

Parient Assignment 43.

Exercises 6-13.

Unit 9.

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$$6. \$10,000 + \$15,000 = \$25,000;$$

$$\$10,000 \div \$25,000 = 0.4; 0.4 \times \$3,200 = \$1,280;$$

$$\$15,000 \div \$25,000 = 0.6; 0.6 \times \$3,200 = \$1,920.$$

Company A: \$1,280.

Company B: \$1,920.

$$7. \$30,000 + \$1,560 = \$31,560;$$

$$8\% \text{ of } \$31,560 = \$2,524.80;$$

$$\$2,524.80 \div 12 = \$210.40.$$

$$8. \$375 \div \$25 = 15.$$

$$9. \$1,470 - \$30 = \$1,440;$$

$$\$1,440 \div \$32 = 45.$$

$$10. 30 \times \$11.50 = \$345.$$

$$\$345 - \$280 = \$65;$$

$$\frac{\$65 \times 100}{\$280} = \frac{\$6,500}{\$280} = \$23.21 = 16\frac{3}{4}\%.$$

$$11. a. \$48 \text{ is } \frac{1}{6} \text{ less than } \$57.60.$$

$$b. 0.22\frac{1}{2} = \frac{22\frac{1}{2}}{100} = \frac{45}{200} = \frac{9}{40}$$

$$12. 5\% \text{ of } \$100 = \$5;$$

$$\$1,200 \div \$5 = 240.$$

$$13. 80\% \text{ of } \$80,000 = \$64,000;$$

$$\$56,000 \div \$64,000 = 0.875;$$

$$0.875 \times \$24,800 = \$21,700.$$

Unit 9.

Section 44.

Exercise 1.

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Section 44

1-1.	Kind of Line	Monthly Pmt	Federal Tax	Local Tax	State Tax	Total Monthly Cost
a.	Individual	\$3.55	1%	3%	2%	\$13.74
b.	Two-party line	5.80	1%	None	None	6.87
c.	Four-party line	5.10	2%	2%	None	5.93
d.	Individual	12.00	0%	None	5%	12.60
e.	Two-party line	7.50	1%	3%	4%	8.16

1-2.	Kind of Line	Total Line Charge	Federal Tax	Local Tax	State Tax	Total Monthly Cost
a.	Individual	13	0%	5%	\$2.15	\$3.83
b.	Two-party line	95	2%	None	8.67	5%
c.	Two-party line	142	2%	4%	9.02	12.86
d.	Individual line	200	2%	3%	12.6	19.70

$125 - 75 = 50$ $75 = \$2.00$ $136 \times 2\% = \$2.72$
 $\$2.00 + \$13.60 = \$15.60$ $\$21.52 + 2\% (\$.43)$
 $= \$22.03$ $\$15.60 + 2\% (\$.31) = \$15.91$ 4%
 The correct answer is \$22.44

1-4. $125 - 50 = 75$ $75 \times \$0.05 = \3.75 $\$7.50 + \3.75
 $= \$11.25$ $\$11.25 \div 2\% (\$.23) = \$11.42$ $\$2.25 + 2\% (\$.17)$
 $= \$2.42$ $\$11.25 - \$2.42 = \$8.83$

\$.65	\$ 3.55
1.35	x .02
.70	.0710
+ .85	+3.550
\$3.55	\$3.6210
	= \$3.62

*According to the Texas LC-200 Calculator.

Section 44.
Review Assignment 44.
Exercises 1-7.

Unit 9.

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1. $\overline{3012}$ b. \$270 is $\frac{1}{7}$ smaller than \$315.

a. $125,000 \overline{) 37,650,000}$
 $\underline{375000}$
 150000
 $\underline{125000}$
 250000
 $\underline{250000}$

c. $3\frac{1}{8} = 3.125$.

2. $\$12.75 + \$5.45 = \$18.20$; $\$18.20 + 2\%(\$18.20) = \$18.56$; $\$18.56 + 3\%(\$18.56) = \$19.12$.

3. $19,134 \text{ cu. ft.} - 13,676 \text{ cu. ft.} = 5,458 \text{ cu. ft.}$
 $150 \text{ cu. ft.} = \$1.25$; $1,200 \text{ cu. ft.} \times 95¢ = \11.40 ;
 $4,108 \text{ cu. ft.} \times 80¢ = \32.86 .

4. $\$.65 + \$.75 + \$.75 + \$.95 = \$3.10$;
 $\$3.10 \div \$55.00 = 5.7\%$.

5. $\$11,200 \times \$.047 = \$526.40$.

6. $90\% \text{ of } \$45,000 = \$40,500$;
 $\$40,500 \div \$100 = \$405$;
 $\$405 \times \$.48 = \$194.40$.

7. a. $\begin{array}{r} \$8.00 \\ \times 40 \\ \hline \$320.00 \end{array}$ $\begin{array}{r} \$8.00 \\ \times 1.5 \\ \hline 4000 \end{array}$ $\begin{array}{r} \$8.00 \\ \times 2 \\ \hline \$16.00 \end{array}$ $\begin{array}{r} \$320.00 \\ 4000 \\ 800 \\ \hline \$544.00 \end{array}$
 $\begin{array}{r} \$12.000 \\ \times 8 \\ \hline \$96.000 \end{array}$

b. $\$544.00 \times 6.13\% = \33.35 .

Unit 9.

Sections 44-45.

Review Assignment 44 - Part 45a.

Exercises 8-10 (for Review Assignment 44),
and Exercises 1-2 (for Part 45a).

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Review Assignment
44 (continued).

8. $128\text{m}^2 - 80\text{m}^2 = 48\text{m}^2$; 60% larger.

9. $\$7.20$ is $37\frac{1}{2}\%$ less than $\$11.52$.

10. $6\frac{1}{2}\%$ of $\$100 = \6.50 ;
 $\$3,200 \div \$6.50 = \$500$.

Section 45.

Part 45a. 1-1. $\$140 \div 4 = \35 ;

$\$42 \times 4 = \168 ;

$\$168 \div 4 = \42 .

1-2. $20,000 \div 5,000 = 4$;

$\$4.95 \times 4 = \19.80 ;

$\$5.95 \times 4 = \23.80 ;

$\$23.80 - \$19.80 = \$4.00$.

1-3. $\$8.00 \times 9 = \72.00 ;

$\$72.00 - \$60.00 = \$12.00$.

1-4. $\$20.00 \times 20 = \400.00 ;

$\$30.00 \times 20 = \600.00 ;

$\$600.00 - \$400.00 = \$200.00$.

2-1. $\$124.99 - \$89.75 = \$35.24$;

$\$39.95 - \$27.50 = \$12.45$;

$\$35.24 + \$12.45 = \$47.69$.

2-2. $\$3.39 \div 3 = \1.13 ; $\$1.13 \times 6 = \6.78 ;

$\$1.25 \times 6 = \7.50 ; $\$7.50 - \$6.78 = \$0.72$.

Section 45.

Part 45a.

Exercises 2-3.

2-3. a. $\$12.89 - 10\%$, or $\$1.29$.

b. $\$12.89 - \$1.29 = \$11.60$.

2-4. $\$189.95 - 8\%$, or $\$15.20$.

$\$189.95 - \$15.20 = \$174.75$.

2-5. $\$14.75 \times 2 = \29.50 ;

$\$59.50 + \$29.50 = \$89.00$;

$\$89.00 - 5\% (\$4.45) = \$84.55$.

3-1. $\$7.49 \div 3 = \2.50 ;

$\$10.95 \div 5 = \2.19 ;

$\$2.50 - \$2.19 = \$.31$.

The 5-pound can is cheaper.

3-2. $\$1.99 \div 4 = \$.498$;

$\$2.85 \div 6 = \$.475$;

$\$.498 - \$.475 = \$.023$.

The 6-oz. jar is cheaper.

3-3. $4 \times 3 = 12$; $\$.89 \times 3 = \2.67 .

$6 \times 2 = 12$; $\$1.09 \times 2 = \2.18 .

6 ears for $\$1.09$ is the better buy.

3-4. a. $\$1.35 \div \$.45 = 3$;

$3 \times 25 = 75$.

b. The red package with 90 sheets of paper at $\$1.35$ is the better buy.

Unit 9.

Section 45.

Part 45a - Review Assignment 45a.

Exercise 3 (for Part 45a),

and Exercises 1-5 (for Review Assignment 45a).

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Exercise 3
(continued).

3-5. a. $\$1.40 \div 7 = \$.20$; $\$.75 \div 4 = \$.19$;

4 oz. box is the better buy.

b. $\$1.65 \div 10 = \$.17$; $\$1.05 \div 6 = \$.18$;

10 for $\$1.65$ is the better buy.

c. $45^\circ \div 2 = 23^\circ$; $99^\circ \div 5 = 20^\circ$;

5-lb. box is the better buy.

d. $\$1.29 \div 200 = \$.006$; $\$.85 \div 200 = \$.004$;

120 mL for 85¢ is the better buy.

Review Assignment
Part 45a.

1. a. $\$84$ is $\frac{3}{4}$ greater than $\$48$.

b. $\$1.15$ is $\frac{1}{2}\%$ of $\$345.00$.

c. $1\frac{1}{3} = 1.375$.

d. $\$792 \times 8\% (\$63.36)$ for 45 days = $\$7.92$.

e. 35% of $147\text{m}^2 = 49\text{m}^2$.

2. $\$1,750 \div \$50 = 35$.

3. $\$30 \times 12 = \360 ; $\$400 \div \$40 = \$400$;
 $\$400 - \$370 = \$30$; $\$370 - \$40 = \$330$;
 $\$330 \times 6\% = \19.80 ; $\$330.00 + \$19.80 = \$349.80$;
 $\$360.00 - \$349.80 = \$11.20$.

4. Due date on 80-day note dated March 10: May 29.
 $\$340 \times 5\% (\$17.00)$ for 80 days = $\$3.87$.

5. $3 \times 4 = 12$; $12 \times \$.65 = \7.80 ;
 $20 \times \$7.80 = \156.00 ; $\$156 + \$1,660 = \$1,816$;
 $\$1,816 - \$1,580 = \$236$.

Section 45.

Review Assignment 45a-Part 45b.

Exercises 6-7 (for Review Assignment 45a),
and Exercise 4 (for Part 45b).

Unit 9.

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$$6. \$24,000 + \$16,000 = \$40,000;$$

$$\$24,000 \div \$40,000 = 0.6; \$16,000 \div \$40,000 = 0.4;$$

$$0.6 \times \$4,600 = \$2,760; 0.4 \times \$4,600 = \$1,840.$$

Company A: \$2,760.

Company B: \$1,840.

$$7. \$33,000 \times 80\% = \$26,400;$$

$$\$22,000 \div \$26,400 = 0.83;$$

$$0.83 \times \$3,000 = \$2,500.$$

$$4-1. \$.75 \times 3 = \$2.25;$$

$$\$2.25 + \$4.00 = \$6.25.$$

$$4-2. 45 \times \$3.00 = \$135.00;$$

$$2 \times \$12.00 = \$24.00;$$

$$12 \times \$.75 = \$9.00;$$

$$\$135.00 + \$24.00 + \$9.00 = \$168.00.$$

$$4-3. \$25.00 + \$15.00 = \$40.00;$$

$$\$1.25 \times 7 = \$8.75;$$

$$\$.35 \times 4 = \$1.40;$$

$$\$40.00 + \$8.75 + \$1.40 = \$50.15.$$

$$4-4. 765 \times \$.15 = \$114.75;$$

$$\$2.00 + \$15.00 = \$17.00;$$

$$\$17.00 \times 3 = \$51.00;$$

$$\$114.75 + \$51.00 = \$165.75.$$

$$4-5. 10 \text{ days } (\$26 \times 10 = \$260);$$

$$\$260 - \$234 = \$26.$$

Unit 9. Section 45.
Part 45b.
Exercises 4-5.

270

Exerc. 4
(cont. ind.)

4-6. $\$3.25 + 7\% (\$.23) = \$3.48$;
 $\$3.48 \times 9 = \31.32 ;
 $\$19.75 \times 7\% (\$.138) = \$2.13$;
 $\$31.32 - \$2.13 = \$10.19$ (Profit).

4-7. $\$7.50 \times 1.5 = \11.25 ; $\$7.50 \times 4 = \30.00 ;
a. $\$7.50$ increased by $50\% = \$11.25$;
b. $7 \times \$7.50 = \52.50 ;
 $\$52.50 - \$30.00 = \$22.50$.

5-1. a. $12 \times \$210 = \$2,520$;
 $15,000 - 12,000 = 3,000$;
 $3,000 \times \$.01 = \30.00 ;
 $\$2,520 - \$30 = \$2,490$;
 $\$2,490 + \$1,000 = \$3,500$;
b. $\$3,500 \div 12,000 = \$.29$.

5-2. $36 \times \$100 = \$3,600$;
 $\$3,600 + \$3,150 = \$6,750$;
 $15,000 - 12,000 = 3,000$; $3,000 \times \$.01 = \30.00 ;
 $\$6,750 - \$30 = \$6,720$; $16,000 + 17,000 = 33,000$;
 $33,000 - 30,000 = 3,000$; $3,000 \times \$.02 = \60.00 ;
 $\$6,720 + \$60 = \$6,780$.

5-3. a. $\$4,900 + \$2,941 = \$7,841$;
 $\$7,841 - \$1,500 = \$6,341$; $\$6,341 - 6\% (\$380.46)$
 $= \$5,960.54$;
b. $36 \times \$100 = \$3,600$;
 $\$3,600 + \$2,941 = \$6,541$; $\$6,541 - \$1,500 = \$5,041$;
 $\$5,041 - 6\% (\$302.46) = \$4,738.54$;
c. Answer "B" is cheaper;
 $\$5,960.54 - \$4,738.54 = \$1,222.00$.

Section 45.

Review Assignment 45.b.

Exercises 1-7.

Unit 9.

271

1. a. $\$343$ is $\frac{1}{8}$ less than $\$392$.

b. $166\frac{2}{3}\%$ of $\$60$ is $\$100$.

c. $\$140$ less 20% of itself is $\$112$.

d. $5\frac{3}{4}\% = .0575$.

e. $\$1,656 \times 10\% (\$165.60)$ for 30 days = $\$13.80$.

2. $\$5.00 + \$7.98 = \$12.98$.

$4 \times \$1.49 = \5.96 ; $\$6.00 + \$5.96 = \$11.96$.

$\$12.98 - \$11.96 = \$1.02$.

3. $\$200.00 \times 12 = \$2,400.00$.

$\$30 + \$400 + \$300 = \730 ;

$\$5,000 \times 20\% = \$1,000$; $\$1,000 + \$730 = \$1,730$.

$\$5,000 \times 6\% = \300 ; $\$300 + \$1,730 = \$2,030$.

$\$2,400 - \$2,030 = \$370$.

4. $\$.20 \times 6 = \1.20 ; $\$1.20 - \$.99 = \$.21$.

5. $92 - 60 = 32$; $60 = \$7.50$.

$32 \times \$.07 = \2.24 ; $\$7.50 + \$2.24 = \$9.74$.

$\$9.74 + 2\% (\$.19) = \$9.93$; $\$9.93 + 4\% (\$.40) = \$10.33$.

6. $19,937 - 19,432 = 505$; $505 - 20 = 485$;

$485 - 130 = 355$. 20 KWH = $\$2.00$;

$130 \text{ KWH} \times \$.04 = \5.20 ; $355 \text{ KWH} \times \$.03 = \10.65 ;

$\$10.65 + \$5.20 + \$2.00 = \17.85 ; $\$17.85 + 2\% (\$.36) = \$18.21$.

7. $\$25,000 \div \$100 = 250$; $250 \times \$.43 = \107.50 ;

$\$107.50 \times 86\% = \92.45 ; $\$107.50 - \$92.45 = \$15.05$.

Unit 9.

Section 45.

General Review.

Exercises 1-4.

272
General
Review.

$$\begin{array}{r}
 12 \\
 1. a. \quad 245.1 \\
 \times 10.4 \\
 \hline
 9804 \\
 2451 \\
 \hline
 2,549.04
 \end{array}$$

$$\begin{array}{r}
 37.2 \\
 6.7 \overline{) 249.24} \\
 \underline{201} \\
 482 \\
 \underline{469} \\
 134 \\
 \underline{134} \\
 0
 \end{array}$$

$$\begin{array}{r}
 c. \quad 6\frac{1}{4} = 6\frac{3}{12} \\
 4\frac{1}{3} = 4\frac{4}{12} \\
 16\frac{1}{2} = 16\frac{6}{12} \\
 + 8\frac{5}{6} = + 8\frac{10}{12} \\
 \hline
 34\frac{23}{12} \\
 = 35\frac{11}{12}
 \end{array}$$

$$d. \quad 24\frac{1}{2} \times 9\frac{1}{8} = \frac{73}{2} \times \frac{73}{8} = \frac{5,329}{16} = 222\frac{1}{16}$$

$$e. \quad 17\frac{3}{5} \div 2\frac{3}{4} = \frac{888}{5} \times \frac{4}{11} = \frac{32}{5} = 6\frac{2}{5}$$

$$f. \quad \frac{16}{25} = \frac{64}{100} = 64\%$$

$$2. \quad \$9,800 \times .063 = \$617.40$$

3.

Grace Newport
Reconciliation Statement
June 30, 1981

Checkbook balance: \$319.02

Less:

Service charge 1.14

Correct checkbook balance: \$317.88

Bank statement balance: \$364.27

Less outstanding checks:

#432 \$21.65

#433 3.98

#434 12.47

#435 8.29 46.39

Available bank balance: \$317.88

$$\begin{array}{r}
 4. \quad \$70,400 \quad \$131,520 \quad \$74,800 \\
 + 61,120 \quad - 85,080 \quad - 46,440 \\
 \hline
 \$131,520 \quad \$46,440 \quad \$28,360
 \end{array}$$

Section 45.
General Review.
Exercises 5-9.

Unit 9.

273

5. Claimant: Ralph Dorr.

Number of Withholding Allowances: 3

Gross earnings for week of April 7: \$248.40.

Income tax deducted: \$24.10.

FICA (Social Security) tax deducted: \$15.23.

6. $\$250 + 10\% (\$25) = \$275;$

$\$275 - \$100 = \$175;$

$\$175.00 \div \$8.75 = 20.$

7. $\$275 \times 12 = \$3,300;$

$\$3,300 - \$2,930 = \$370.$

8. $2\% \text{ of } \$28,000 = \$560;$

$\$290 \times 12 = \$3,480.$

$\$550 + \$330 + \$560 + \$130 + \$174 = \$1,744.$

$\$3,480 - \$1,744 = \$1,736; \$1,736 \div \$28,000 = 6.2\%.$

9. 96 kilograms decreased by $12\frac{1}{2}\%$
 $= 84 \text{ kilograms.}$

Unit 9. Section 45.
General Review.
Exercises 10-12.

274

General Review
(continued).

10. $0.250 = \frac{250}{1,000} = \frac{1}{4}$

11. $\$10,300 - \$6,500 = \$3,800;$
 $\$1,180 - \$800 = \$380;$
 $\$380 \div \$3,800 = 10\%.$

12.

Andrea Hyde Reconciliation Statement June 30, 1981	
Checkbook balance: \$871.62	Bank statement balance: \$884.31
Less:	Less outstanding checks:
United States Savings Bank 75.00	#401 \$23.19
	#402 44.50
	67.69
Correct checkbook balance: \$816.62	Available bank balance: \$816.62

Section 46.
Part 46a.
Exercises 1-2.

Unit 10.

Unit 10, Section 46.

275

1-1.	Original Cost	Trade-in Value		Annual Depreciation
		At End of	Amount	
a.	\$ 4,800	4 years	\$ 1,200	\$ 900.00
b.	6,200	5 years	1,000	1,040.00
c.	4,500	3 years	1,650	950.00
d.	7,500	6 years	750	1,125.00

1-2. $\$5,600 - \$2,000 = \$3,600;$
 $\$3,600 \div 3 = \$1,200.$

1-3. $\$7,400 + \$6,200 = \$13,600;$
 $\$13,600 - \$8,000 = \$5,600;$
 $\$5,600 \div 4 = \$1,400.$

2-1.	Original Cost	Trade-In Value		Rate of Depreciation
		at End of	Amount	
a.	\$ 6,400	5 years	\$ 1,600	15%
b.	6,000	3 years	2,040	22%
c.	7,000	6 years	1,120	14%
d.	8,000	4 years	2,240	18%
e.	4,760	7 years	595	12½%

2-2. $\$5,900 - \$1,180 = \$4,720;$
 $\$4,720 \div 5 = \$944;$
 $\$944 \div \$5,900 = 16\%.$

2-3. $\$6,250 - \$2,875 = \$3,375;$
 $\$3,375 \div 3 = \$1,125;$
 $\$1,125 \div \$6,250 = 18\%.$

Unit 10.

Section 46.

Part 46a - Review Assignment 46a.

Exercise 2 (for Part 46a),

and Exercises 1-2 (for Review Assignment 46a).

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Exercise 2
(continued).

$$2-4. \quad \$9,600 - \$3,072 = \$6,528;$$

$$\$6,528 \div 4 = \$1,632;$$

$$\$1,632 \div \$9,600 = 17\%.$$

$$2-5. \quad \$5,700 - \$513 = \$5,187;$$

$$\$5,187 \div 6\frac{1}{2} = \$798;$$

$$\$798 \div \$5,187 = 15.4\%.$$

$$2-6. \quad 15\% \text{ of } \$7,000 = \$1,050;$$

$$3 \times \$1,050 = \$3,150;$$

$$\$7,000 - \$3,150 = \$3,850.$$

$$2-7. \quad 18\% \text{ of } \$5,000 = \$900;$$

$$5 \times \$900 = \$4,500;$$

$$\$5,000 - \$4,500 = \$500.$$

Review Assignment 46a.

1. Annual depreciation: (b) Depreciation per year.
rate of depreciation: (c) Shows depreciation as
a percent.

straight-line method: (a) Spreads depreciation evenly.

$$2. \quad \begin{array}{r} \overset{2+3}{12} \\ \text{a. } \$13,500 \\ \times 0.0635 \\ \hline 67500 \\ 40500 \\ 81000 \\ \hline \$857.2500 \\ = \$857.25 \end{array}$$

$$\text{b. } 16\frac{2}{3}\% \text{ less than } \$168$$

$$\text{is } \$140.$$

$$\text{c. } \$720 \times 9\% (\$64.80)$$

$$\text{for 40 days} = \$7.20.$$

Section 46.
Review Assignment 46a.
Exercises 3-11.

Unit 10.

277

3. $\$5,185 - \$655 = \$4,530$;
 $\$4,530 \div 6 = \755.00 ;
 $\$755.00 \div \$5,185.00 = 14.6\%$.
4. $\$5,000 - \$600 = \$4,400$;
 $\$4,400 \div 8 = \550 ;
 $\$550 \div \$5,000 = 11\%$.
5. $\$3,500 \div \$1,000 = 3.5$;
 $3.5 \times \$52.071 = \182.25 .
6. May 14 to August 12: 90 days.
 $\$1,600 \times 8\% (\$128) \text{ for } 90 \text{ days} = \32 .
7. $6,416 \text{ KWH} - 6,232 \text{ KWH} = 184 \text{ KWH}$;
 $184 \times \$0.0393 = \7.23 ;
 $\$7.23 + 6\% (\$.43) = \$7.66$.
8. $30 \times \$14.80 = \444.00 ;
 $\$444.00 - \$360.00 = \$84.00$;
 $\frac{\$84 \times 100}{\$360} = \frac{\$8,400}{\$360} = \$23.33 = 17\%$.
9. $40 \text{ cm} + 60 \text{ cm} + 90 \text{ cm} = 190 \text{ cm} = 1.90 \text{ m}$;
 $2.25 \text{ m} - 1.90 \text{ m} = .35$; under the limit.
10. $\$36$ is $\frac{1}{3}$ smaller than $\$54$.
11. a. $\$100 \times 5\% = \5 ;
 $\$600 \div \$5 = 120$.
b. $\$85.50 \times 120 = \$10,260$.

Unit 10. Section 46.
Part 46b.
Exercises 3.

278

3-1.	Original Cost	Interest Allowance	Depreciation	Other Expenses	Total Operating Cost
a.	\$4,800	5%	15%	\$1,200	\$2,160
b.	5,500	6%	18%	1,750	3,070
c.	7,000	7%	16%	1,540	3,150
d.	8,000	8%	20%	2,200	4,440

3-2. Gas and oil: \$ 450
Repairs and miscellaneous expenses: 98
Insurance: 365
License plates: 35
Interest on investment (6% of \$5,000): 300
Depreciation (25% of \$5,000): 1,250
Total operating cost: \$2,498

3-3. Gas and oil: \$ 515
Insurance: 427
License plates: 30
Repairs: 125
Other expenses: 99
Total operating cost: \$1,196

3-4. License plates: \$ 28.00
Insurance: 415.00
Gas and oil: 460.00
Interest (7% of \$6,250): 437.50
Repairs: 65.00
Depreciation (30% of \$6,250): 1,875.00
Total operating cost: \$3,280.50

Section 46.
Part 46a.
Exercise 4.

Unit 10.

279

4-1. $3,500 \text{ lbs.} \div 100 \text{ lbs.} = 35;$
 $35 \text{ lbs.} \times \$.90 = \$31.50.$
 $1588 \text{ kg.} \div 100 \text{ kg.} = 15.88;$
 $15.88 \text{ lbs.} \times \$1.98 = \$31.44.$

4-2. $17.4 = 17 \text{ mi.}$ $7.8 = 8 \text{ km.}$

$\begin{array}{r} 14 \text{ gal.} \overline{)258.0} \\ \underline{14} \\ 118 \\ \underline{112} \\ 60 \\ \underline{56} \\ 40 \end{array}$	$\begin{array}{r} 53 \text{ L} \overline{)415.0} \\ \underline{371} \\ 440 \\ \underline{424} \\ 16 \end{array}$
--	--

4-3. $32.6 = 33 \text{ mi.}$ $13.9 = 14 \text{ km.}$

$\begin{array}{r} 13 \text{ gal.} \overline{)424.0} \\ \underline{39} \\ 34 \\ \underline{26} \\ 80 \\ \underline{78} \\ 2 \end{array}$	$\begin{array}{r} 49 \text{ L} \overline{)682.0} \\ \underline{49} \\ 192 \\ \underline{147} \\ 450 \\ \underline{441} \\ 9 \end{array}$
---	--

4-4 a. $26.1 = 26 \text{ mi.}$ $10.2 = 10 \text{ km.}$

$\begin{array}{r} 30 \text{ gal.} \overline{)725.0} \\ \underline{60} \\ 125 \\ \underline{120} \\ 50 \\ \underline{30} \\ 20 \end{array}$	$\begin{array}{r} 114 \text{ L} \overline{)1167.0} \\ \underline{114} \\ 270 \\ \underline{228} \\ 42 \end{array}$
--	--

Unit 10.

Section 46.

Part 46b

Exercise 4.

280

Exercise 4-4
(continued)

$$b. \quad 30 \text{ gal.} \times \$.70 = \$21.00.$$

$$114 \text{ L} \times \$.184 = \$20.98.$$

$$c. \quad \$.028 = \$.03$$

$$\$.017 = \$.02$$

$$725 \text{ mi.}) \$21.000$$

$$1167 \text{ km.}) \$20.980$$

$$\underline{1450}$$

$$\underline{1167}$$

$$6500$$

$$9310$$

$$\underline{5800}$$

$$\underline{8169}$$

$$700$$

$$1141$$

4.5. a. Gas and oil:

\$ 451.50

Insurance:

380.00

Depreciation:

750.00

Tires and parts:

180.00

License and inspection:

30.00

Garage parking fee:

+ 157.90

Total operating cost:

\$1,949.40

$$b. \quad \$.041 = \$.04$$

$$\$.025 = \$.02$$

$$10,830 \text{ mi.}) \$451.500$$

$$17,429 \text{ km.}) \$451.500$$

$$\underline{43320}$$

$$\underline{34858}$$

$$18300$$

$$102920$$

$$\underline{10830}$$

$$\underline{87145}$$

$$7470$$

$$15775$$

$$c. \quad 19 \text{ mi.}$$

$$2.0 = 2 \text{ km.}$$

$$570 \text{ gal.}) 10,830$$

$$2152 \text{ L.}) 17,429.0$$

$$\underline{570}$$

$$\underline{17,264}$$

$$5130$$

$$1650$$

$$\underline{5130}$$

Section 46.
Part 46b.
Exercises 4-5.

Unit 10.

281

4-6.

$\begin{array}{r} 750 \text{ gal.} \\ 20 \text{ mpg} \overline{) 15000} \\ \underline{140} \\ 1000 \\ \underline{1000} \\ 0 \end{array}$	$\begin{array}{r} 2840 \text{ gal.} \\ 8.5 \text{ km/L} \overline{) 24140.0} \\ \underline{170} \\ 714 \\ \underline{680} \\ 3400 \\ \underline{3400} \\ 0 \end{array}$
--	---

$750 \text{ gal.} \times \$.72 = \540.00

$2,840 \text{ gal.} \times \$.19 = \539.60

4-7.

$\begin{array}{r} 12 \text{ gal.} \\ 25 \text{ mi.} \overline{) 300} \\ \underline{25} \\ 50 \\ \underline{50} \\ 0 \end{array}$	$\begin{array}{r} 455 = 46 \text{ gal.} \\ 10.6 \text{ km} \overline{) 483.00} \\ \underline{424} \\ 590 \\ \underline{530} \\ 600 \\ \underline{530} \\ 70 \end{array}$
--	--

b. $14 \text{ gal.} - 12 \text{ gal.} = 2 \text{ gal.}$
 $53 \text{ L} - 46 \text{ L} = 7 \text{ L.}$

c. $12 \text{ gal.} \times \$.80 = \9.60
 $46 \text{ L} \times \$.21 = \9.66

5-1. $2:15 \text{ p.m. (14:15)} - 9:30 = 4:45;$
 $4:45 - 9:00 = 3:45.$

5-2. $5:25 \text{ p.m. (17:25)} - 9:15 = 8:00;$
 $8:00 - 1:15 = 6:45.$

5-3. $5:45 \text{ p.m. (17:45)} - 7:15 = 10:30;$
 $10:30 - 1:45 = 8:45.$

Unit 10, Section 46,
Part 46b,
Exercises 5.

282

Exercise 5
(continued).

$$5-4. \quad 357 \text{ mi.} \div 7 = 51 \text{ mph.}$$

$$574 \text{ km.} \div 7 = 82 \text{ kmph.}$$

$$5-5. \quad 69 \text{ mi.} \div 90 \text{ min. (1 hr. 30 min.)} = 46 \text{ mph.}$$

$$111 \text{ km.} \div 90 \text{ min.} = 74 \text{ kmph.}$$

$$5-6. \quad 225 \text{ mi.} \div 270 \text{ min. (4 hr. 5 min.)} = 50 \text{ mph.}$$

$$362 \text{ km.} \div 270 \text{ min.} = 80 \text{ kmph.}$$

$$5-7. \quad 26 \text{ mi.} \div 45 \text{ min. } \left(\frac{3}{4} \text{ hr.}\right) = 35 \text{ mph.}$$

$$42 \text{ km.} \div 45 \text{ min.} = 56 \text{ kmph.}$$

$$5-8. \quad 18 \text{ mi.} \div 20 \text{ min. } \left(\frac{1}{3} \text{ hr.}\right) = 54 \text{ mph.}$$

$$29 \text{ km.} \div 20 \text{ min.} = 87 \text{ kmph.}$$

$$5-9. \quad 20 \text{ mi.} \div 24 \text{ min. } \left(\frac{2}{5} \text{ hr.}\right) = 50 \text{ mph.}$$

$$32 \text{ km.} \div 24 \text{ min.} = 80 \text{ kmph.}$$

$$5-10. \quad 39 \text{ mi.} \div 40 \text{ min. } \left(\frac{2}{3} \text{ hr.}\right) = 58.5 \text{ mph.}$$

$$63 \text{ km.} \div 40 \text{ min.} = 94.5 \text{ kmph.}$$

$$5-11. \quad 3 \text{ hr. } 45 \text{ min.} = 225 \text{ min.}$$

$$\begin{array}{r} 124 \\ 46.0 \text{ mi.} \\ \times 3.75 \text{ hr.} \\ \hline 2300 \\ 3220 \\ 1380 \\ \hline 172.500 \text{ mi.} \end{array}$$

$$\begin{array}{r} 12 \\ 74.0 \text{ km.} \\ \times 3.75 \text{ hr.} \\ \hline 3700 \\ 5180 \\ 2220 \\ \hline 277.500 \text{ km.} \end{array}$$

Section 46.
Review Assignment 46b.
Exercises 1-6.

Unit 10.

283

$$\begin{array}{r}
 1. a. \quad \quad \quad .2032 \\
 215,000 \overline{) 43,688.0000} \\
 \underline{430000} \\
 688000 \\
 \underline{645000} \\
 430000 \\
 \underline{430000} \\
 0
 \end{array}$$

b. \$210 is $\frac{1}{7}$ smaller than \$245.

c. $\$450 \times 8\% (\$36)$
for 30 days = \$3.

d. $\$900 \times 9\frac{1}{2}\% (\$85.50)$
for 140 days = \$33.25.

$$\begin{array}{r}
 e. \quad \overset{6}{2}5.\overset{6}{5}m \\
 \times \quad 12m \\
 \hline
 306.0m^2
 \end{array}$$

2. $144 \text{ mi.} \div 4\frac{1}{2} \text{ hr. (270 min.)} = 32 \text{ mph.}$

3. $4:35 \text{ p.m. (16:35)} - 8:45 = 7:50;$
 $7:50 - 1:15 = 6:35.$

4. $\$5,448 - \$1,400 = \$4,048;$
 $\$4,048 \div 4 = \$1,012;$
 $\$1,012 \div \$5,448 = 18.5\%.$

5. $\$6,300 \div \$2,520 = \$3,780;$
 $\$3,780 \div 4 = \$945;$
 $\$945 \div \$6,300 = 15\%.$

6. Gas and oil:	\$ 426
Repairs:	49
Insurance:	479
License plates:	42
Interest (8% of \$5,800):	464
Depreciation (18% of \$5,800):	1,044
Total operating cost:	\$2,504

Unit 10. Sections 46-47.

Review Assignment 46b - Section 47.

Exercises 7-9 (for Review Assignment 46b),
and Exercise 1 (for Section 47).

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Review Assignment
46b (continued).

7. $245 \text{ km} \div 3.5 \text{ hours (210 min.)} = 70 \text{ kmph.}$

8. a. \$5.60 is $37\frac{1}{2}\%$ less than \$8.96.
b. $\$620 \times 7\frac{1}{2}\%$ (\$46.50) for 60 days
= \$7.75.

9. $\$1,200 - \$1,000 = \$200;$
 $\$200 \div 8\% = \$2,500;$
 $\$2,500 + \$12,000 = \$14,500.$

Section 47.

Section 47.

1-1.	Car Used for	Coverage		
		Bodily Injury	Property Damage	Total Annual Premium
a.	Pleasure only	\$10/20,000	\$5,000	\$158.00
b.	Driving to work	\$10/20,000	\$5,000	\$179.00
c.	Pleasure only	\$20/40,000	\$5,000	\$178.00
d.	Driving to work	\$10/20,000	\$10,000	\$183.45
e.	Business	\$25/50,000	\$25,000	\$261.82

1-2. \$20/40,000 bodily injury ($125\% \times \$110$): \$137.50
\$5,000 property damage: + 109.00
Total cost of premium used for business: \$246.50

1-3. \$100/300,000 bodily injury ($175\% \times \$110$): \$192.50
\$50,000 property damage ($112\% \times \109): 122.08
\$100 deductible collision insurance: 125.00
Comprehensive damage insurance: + 54.00
Total annual premium: \$493.58

Section 47- Review Assignment 47.

Exercises 1 (for Section 47),
and Exercises 1 (for Review Assignment 47).

1-4. \$50/100,000 bodily injury ($\$90.00 \times 152\%$) = \$ 136.80
 \$5,000 property damage: 89.00
 Comprehensive damage insurance: 34.00
 \$100 deductible collision insurance: + 105.00
 Total annual premium cost for driving to work: \$364.80

5. $\$462.00 \times 52\% = \240.24
 $\$462.00 - \$240.24 = \$221.76$

6. Bodily injury coverage: \$ 206.50
 Property damage: 127.00
 Comprehensive damage: + 63.00
 Total annual premium cost: \$ 396.50
 $\$396.00 \times 74\% = \293.04
 $\$396.00 - \$293.04 = \$102.96$

1. Bodily injury: (d) Covers liability for injury to other persons.
 collision: (c) Covers damage to own car from collision or upset.
 comprehensive damage: (e) Covers damage to own car from causes other than collision.
 deductible: (b) Insured pays part of the damage cost.
 property damage: (a) Covers damage to other people's property.

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Review Assignment 47 (continued)

$$\begin{array}{r}
 2 \ 2 \ 2 \\
 2. \ a. \ 47.580 \\
 299.300 \\
 3.975 \\
 + 95.660 \\
 \hline
 446.515
 \end{array}$$

$$b. \ 14\frac{1}{8} \div 1\frac{2}{3} = \frac{28}{8} \times \frac{3}{4} = \frac{17}{2} = 8\frac{1}{2}$$

$$c. \ \$1,200 \times 7\frac{1}{2}\% (\$90.00) \\ \text{for 25 days} = \$6.25$$

$$\begin{aligned}
 3. \quad & \$5,760 - \$900 = \$4,860; \\
 & \$4,860 \div 6 = \$810; \\
 & \$810 \div \$5,760 = 14\%.
 \end{aligned}$$

$$\begin{aligned}
 4. \quad & 3:00 \text{ p.m. } (15:00) - 10:45 \text{ a.m.} = 4:15; \\
 & 4:15 - :45 = 3:30.
 \end{aligned}$$

$$\begin{aligned}
 5. \quad & 4,162 - 3,982 = 180; \\
 & 180 \text{ mi.} \div 225 \text{ min. } (3\frac{3}{4} \text{ hr.}) = 48 \text{ mph.}
 \end{aligned}$$

$$\begin{aligned}
 6. \quad & 4 \times \$1.27\frac{1}{2} = \$5.10; \\
 & \$5.10 \times 80 = \$408.00.
 \end{aligned}$$

$$\begin{aligned}
 7. \quad & \$60,000 + \$36,000 = \$96,000; \\
 & \$60,000 \div \$96,000 = 0.625; 0.625 \times \$4,800 = \$3,000. \\
 & \$36,000 \div \$96,000 = 0.375; 0.375 \times \$4,800 = \$1,800. \\
 & \text{Reliable Insurance Company: } \$3,000. \\
 & \text{Star Insurance Company: } \$1,800.
 \end{aligned}$$

$$\begin{aligned}
 8. \quad & 60 \text{ kilometers} \div 3 = 20 \text{ kilometers;} \\
 & 45 \div 3 = 15; \\
 & 20 \text{ kilometers} \times 4 = 80 \text{ kilometers.}
 \end{aligned}$$

Section 48.

287

1-1.	For:	Apr. 4	Apr. 5	Apr. 6	Total
	Sara Rubin				
	Roundtrip airline ticket	\$142.00			\$142.00
	Taxi fare	21.50			21.50
	Lodging	38.70	\$38.70		77.40
	Food	9.75	17.00	\$6.25	33.00
	Tips	13.50			13.50
	Totals	\$225.45	\$55.70	\$6.25	\$287.40

1-2.	For:	Nov. 15	Nov. 16	Nov. 17	Nov. 18	Total
	Sally Dunham					
	Roundtrip Train ticket	\$203.00				\$203.00
	Roomette	84.50				84.50
	Taxi fare	16.00				16.00
	Hotel room		\$38.16			38.16
	Meals	14.50	13.75	\$15.95	\$16.20	60.40
	Tips	21.50				21.50
	Totals	\$339.50	\$51.91	\$15.95	\$16.20	\$423.56

3. $397 \times \$.20 = \79.40

	For:	Dec. 3	Dec. 4	Dec. 5	Total
	John Unger				
	Mileage	\$79.40			\$79.40
	Hotel room	38.52	\$38.52		77.04
	Food	15.50	22.40	\$5.50	43.40
	Parking	11.78			11.78
	Telephone calls	3.55			3.55
	Tips	11.50			11.50
	Totals	\$160.25	\$60.92	\$5.50	\$226.67

Unit 10. Section 48.
Exercise 2.

288

2-1. a. Train roundtrip ticket: \$136.00
Bus fare (2 x \$.35): .70
Taxi (2 x \$3.25): 6.50
Totals \$143.20

b. Roundtrip air ticket: \$150.00
Taxi from home to airport (2 x \$4.50): 9.00
Taxi from airport to mother's home (2 x \$5.75): 11.50
Totals \$170.50

c. \$170.50 - \$143.20 = \$27.30;
Train is cheaper (by train).

2-2. a. Total mileage cost by car (miles): \$65.60
Cost of meals: 23.00
Total \$88.60

Total mileage cost by car (kilometers): \$66.00
Cost of meals: 23.00
Total \$89.00

b. Roundtrip airfare: \$96.00
Total mileage cost by car (miles): 5.6
Parking total (3 x \$4.25): 12.75
Total \$114.35

Roundtrip airfare: \$96.00
Total mileage cost by car (kilometers): 5.6
Parking total (3 x \$4.25): 12.75
Total \$114.35

c. \$114.35 - \$88.60 = \$25.75 (miles);
\$114.35 - \$89.00 = \$25.35 (kilometers); car is cheaper.

Section 48,
Review Assignment 48.
Exercises 1-7.

Unit 10.

289

1. a. \$98 is $\frac{3}{4}$ greater than \$56.
b. \$1.44 is $\frac{1}{3}\%$ of \$435.
c. $\$350 \times 6\%$ (\$21.00) for 45 days = \$2.63.
d. September 16 to November 16: 61 days.
e. Due date of 3-month note dated March 15:
June 15.

2. $\$ \frac{.152}{508} = \$.15$

$$\begin{array}{r} 508 \overline{) \$77.250} \end{array}$$

$$\begin{array}{r} 508 \\ 2645 \\ \underline{2540} \end{array}$$

$$1050$$

$$\underline{1016}$$

$$34$$

3. $104 \text{ mi.} \div 160 \text{ min.}$
 $(2 \text{ hr. } 40 \text{ min.}) = 39 \text{ mph.}$

4. $46 \text{ mph} \times 2 \text{ hr. } 30 \text{ min.}$
 $(150 \text{ min.}) = 115 \text{ mph.}$

$$74 \text{ kmph} \times 2 \text{ hr. } 30 \text{ min.}$$
$$= 185 \text{ kmph.}$$

5. 8% of \$52,000 = \$4,160;
 $\$4,160 + \$2,980 = \$7,140$;
 $\$7,140 \div 12 = \595 .

6. $\$6,400 - \$1,300 = \$5,100$;
 $\$5,100 \div 5 = \$1,020$;
 $\$1,020 \div \$6,400 = 16\%$.

7. $1,200 \times \$.60 = \7.20 ;
 $3,600 \times \$.44 = \15.84 ;
 $922 \times \$.32 = \2.95 ;
 $\$7.20 + \$15.84 + \$2.95 = \25.99 .

Unit 10.

Sections 48-49.

Review Assignment 48-Section 49.

Exercises 8-11 (for Review Assignment 48),
and Exercise 1 (for Section 49).

290

Review Assignment 48 (continued).

8. $272 \text{ kilometers} \div 64 \text{ kilometers} = 4\frac{1}{4} \text{ hours.}$

9. a. $\frac{5}{8}\% = .00625.$

b. $\$1.05$ is $\frac{2}{5}$ larger than $\$.75.$

10. a. $4 \times \$.37\frac{1}{2} = \$1.50;$

$\$450 \div \$1.50 = \$300.$

b. $\$.35\frac{1}{2} \times 300 = \$106.50.$

11. $80\% \text{ of } \$30,000 = \$24,000;$

$\$24,000 \div \$30,000 = 0.8;$

$0.8 \times \$4,000 = \$3,200.$

Section 49.

Section 49. 1-1.	Weight	Destination	Cost of Postage
a.	6 lb.	Zone 3	\$1.84
b.	5 lb.	Zone 7	2.77
c.	10 lb.	Zone 5	2.83
d.	15 lb.	Zone 8	6.80
e.	3 $\frac{1}{2}$ lb.	Zone 8	3.00
f.	7 $\frac{3}{4}$ lb.	Zone 4	2.20
g.	8 lb. 14 oz.	Zone 2	1.85
h.	10 lb. 2 oz.	Local	1.94
i.	a 3-lb. parcel to a city 180 miles away: \$1.53.		
j.	a 4 $\frac{3}{4}$ -pound parcel to a city 1,375 miles away: \$2.43.		

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2.	Coverage	Fee
a.	\$15.00	\$.50
b.	125.00	1.40
c.	50.00	.85
d.	11.00	.50
e.	21.00	.85
f.	65.00	1.10
g.	100.00	1.10
h.	162.00	1.75

2-1. 6-lb. parcel to city 798 miles away: \$2.28
 Fee of coverage for \$150.00: + 1.40
 Total: \$3.68

2-2. 7-lb. parcel to city 1,323 miles away: \$2.82
 Fee of coverage for \$50.00: + .85
 Total: \$3.67

2-3. 4 lb., 11 oz. parcels to Zone 8 (3 packages): \$10.17
 Fee of coverage for \$75.00: + 3.30
 Total: \$13.47

4.	Length	Width	Thickness	Weight	Answer
a.	19 in.	10 in.	6 in.	25 lb.	Yes
b.	36 in.	12 in.	8 in.	18 lb.	Yes
c.	22 in.	8 in.	4 in.	43 lb.	No
d.	42 in.	16 in.	3 in.	39 lb.	Yes
e.	26 in.	12 in.	11 in.	30 lb.	Yes

Unit 10. Section 49- Review Assignment 49.
Exercise 3 (for Section 49),
and Exercises 1-2 (for Review Assignment 49).

292

$$3-1. \quad 250 \div 100 = 2.5;$$
$$\$12.50 \times 2.5 = \$31.25.$$

$$3-2. \quad 140 \div 100 = 1.4;$$
$$\$17.69 \times 1.4 = \$24.77.$$

$$3-3. \quad 171 \div 100 = 1.71;$$
$$\$23.42 \times 1.71 = \$40.05.$$
$$\$2,500 \div \$100 = 25,$$
$$25 \times \$.18 = \$4.50;$$
$$\$40.05 + \$4.50 = \$44.55.$$

$$3-4. \quad \$785 - \$50 = \$735;$$
$$\$.40 \times 7 (\$700 \div \$100) = \$2.80;$$
$$\$35 \div \$100 = .35 \text{ or } \frac{7}{20};$$
$$\$.40 \times 8 = \$3.20.$$

$$3-5. \quad 3 \times 72 \text{ kg} = 216 \text{ kg};$$
$$2 \times 56 \text{ kg} = 112 \text{ kg};$$
$$216 \text{ kg} + 112 \text{ kg} = 328 \text{ kg};$$
$$328 \times \$10.90 = \$35.75.$$

Review Assignment 49.

1. express: (c) Fast service for light goods.
freight: (d) Delivery of heavy shipments.
parcel post: (a) Forthcoming mail.
travel expense voucher: (b) Record of travel expenses.

2. a. \$396 is $\frac{1}{3}$ greater than \$297.

Section 49.

Review Assignment 49.

Exercises 2-6.

Unit 10.

293

$$\begin{array}{r}
 \text{ls.} \quad .01342 \\
 \#305,000 \overline{) \$4,093,100.00} \\
 \underline{305000} \\
 1043100 \\
 \underline{915000} \\
 1281000 \\
 \underline{1220000} \\
 610000 \\
 \underline{610000}
 \end{array}$$

c. Due day of 75-day note dated Apr. 19: July 2.

d. May 18 to Sept. 5: 110 days.

e. $\$800 \times 6\% (\$48.00)$ for 33 days = $\$4.40$

3. 2 lb. 4 oz. = 3 lb.; 3 lb. $\times 5 = 15$ lb.; zone 4; $5 \times \$1.73 = \8.65 ; fee for $\$10$ coverage = $\$.50$; $\$.50 \times 5 = \2.50 ; $\$8.65 + \$2.50 = \$11.15$.

4. $4 \times 185 \text{ lbs.} = 740 \text{ lbs.}$; $3 \times 65 \text{ lbs.} = 195 \text{ lbs.}$; $740 \text{ lbs.} + 195 \text{ lbs.} = 935 \text{ lbs.}$; $935 \times \$5.45 = \50.96 .

$$\begin{array}{r}
 5. \quad \begin{array}{r} 351.5 \\ \times 25.703 \\ \hline 703.0 \end{array} \quad \begin{array}{r} \$.056 = \$.06 \\ \$39,400 \\ \underline{3515} \\ 4250 \\ \underline{4218} \\ 32 \end{array}
 \end{array}$$

6. $\$.28 \times 4 = \1.12 ; $\$1.12 \div \$32 = 3.5\%$.

Unit 10.

Section 49.

Review Assignment 49 - General Review.

Exercises 7-9 (for Review Assignment 49),
and Exercises 1-4 (for General Review).

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Review Assignment
49 (continued).

$$7. \quad 25 \text{ mi} \div 35 \text{ min.} = 0.71; 0.71 \times 60 = 43 \text{ mph.}$$

$$40 \text{ km.} \div 35 \text{ min.} = 1.14; 1.14 \times 60 = 69 \text{ kmph.}$$

$$8. \quad 125 \text{ miles} \div 50 \text{ mph} = 2\frac{1}{2} \text{ hrs.}$$

$$200 \text{ kilometers} \div 80 \text{ kmph} = 2\frac{1}{2} \text{ hrs.}$$

$$9. \quad \$.75 \times 4 = \$ 3.00; \$ 2,400 \div 800 = \$ 3.00;$$

$$\$ 52.25 \times 800 = \$ 41,800.$$

General
Review

$$1. \quad \begin{array}{r} 12\overline{)154.3} \\ \times 25.6 \\ \hline 7715 \\ 3026 \\ \hline 3,950.08 \end{array}$$

$$b. \quad \begin{array}{r} 91.4 \\ 5.3 \overline{)454.2} \\ \underline{53} \\ 212 \\ \underline{212} \\ 0 \end{array}$$

$$c. \quad \begin{array}{r} 15\frac{3}{4} = 15\frac{6}{8} \\ 8\frac{1}{2} = 8\frac{4}{8} \\ + 22\frac{1}{2} = + 22\frac{4}{8} \\ \hline 45\frac{15}{8} = 46\frac{7}{8} \end{array}$$

$$d. \quad \begin{array}{r} 25\frac{1}{6} = 25\frac{2}{12} \\ - 8\frac{2}{3} = - 8\frac{8}{12} \\ \hline 16\frac{2}{12} = 16\frac{1}{6} \end{array}$$

$$e. \quad 24\frac{1}{2} \times 5\frac{1}{3} = \frac{121}{2} \times \frac{16}{3} = \frac{1936}{6} = 129\frac{2}{3} = 129\frac{2}{3}.$$

$$f. \quad 16\frac{1}{2} \div \frac{3}{4} = \frac{32}{2} \times \frac{4}{3} = 22\frac{2}{3}.$$

$$2. \quad \$ 20,000 \times 4\frac{1}{4}\% = \$ 850.$$

$$3. \quad 4:15 \text{ p.m. (16:15)} - 8\frac{1}{2} \text{ hrs.} = 7:30;$$

$$7:30 - 1:15 = 6:15.$$

4. Gasoline and oil:	\$ 464.00
Insurance:	355.00
Interest (9% of \$5,150):	463.50
Cost of car (18% of \$5,150):	927.00
Repairs and other expenses:	+ 103.00
Total operating cost:	\$2,312.50

Section 49.
General Review.
Exercises 5-11.

Unit 10.

295

$$\begin{array}{r}
 5. \quad \begin{array}{r} \$ 5.30 \\ 40 \overline{) \$ 212.00} \\ \underline{200} \\ 1200 \\ \underline{1200} \\ 1200 \end{array} \quad \begin{array}{r} \$ 5.30 \\ \times 1.5 \\ \hline 2650 \end{array} \quad \begin{array}{r} \$ 7.95 \\ \times 6 \\ \hline \$ 47.70 \end{array} \quad \begin{array}{r} \$ 212.00 \\ + 47.70 \\ \hline \$ 259.70 \end{array} \\
 \hline
 \end{array}$$

6. Claimant: Mike Ritter
Number of withholding allowances: 2
Gross earnings: \$234.30
Income tax withholding: 24.90
FICA tax withholdings: 14.36

7. $\$33,900 \div 15 = \$2,260$.
Ryan's share: $\$15,820$ ($7 \times \$2,260 = \$15,820$).
Mapes' share: $\$18,080$ ($8 \times \$2,260 = \$18,080$).

8. $4 \times \$2.25 = \9.00 ;
 $\$9.00 \div \$180 = 5\%$.

9. $200 - 160 = 40$; 25% increase.
 $200 + 25\% \text{ of } 200 = 250$.

10. a. $\$1,500 \times 9\% (\$135.00)$ for 90 days
 $= \$33.75$.

b. Due date on 90-day note dated August 4*:
November 2.

11. $12 \times \$30 = \360 ;
 $\$360 + \$36 = \$396$;
10% increase.

That's when 15 girls kicked their asses off at Clammy's wedding!

Unit 10.

Section 49.

General Review.

Exercises 12-16.

296

General Review
(continued)

$$12. \$21.50 \times 12 = \$258.00; \$258.00 - \$225.00 = \$33.00;$$
$$\$225.00 \times 8\% = \$18.00; \$225.00 + \$18.00 = \$243.00;$$
$$\$258.00 - \$243.00 = \$15.00.$$

$$13. \$1,000 \times .625 = \$625.00;$$
$$\$625 \times 5\% = \$31.25;$$
$$\$31.25 \div \$625 = 5\%.$$

$$14. 20\% \text{ of } \$5,250 = \$1,050;$$
$$\$4,200 \div 2\% = \$210,000;$$
$$\$210 \times \$1.20 = \$252.00.$$

$$15. \$15,000 + \$25,000 = \$40,000.$$
$$15,000 \div \$40,000 = .375; .375 \times \$12,000 = \$4,500.$$
$$\$25,000 \div \$40,000 = .625; .625 \times \$12,000 = \$7,500.$$

First Insurance Company: \$4,500.

Alliance Insurance Company: \$7,500.

$$16. 28 \times \$.15 = \$4.20; 84 \times \$.13 = \$10.92.$$
$$32 \times \$.15 = \$4.80; 32 \times \$.13 = \$4.16.$$
$$8 \times \$.15 = \$1.20.$$
$$\$4.20 + \$10.92 + \$4.80 + \$4.16 + \$1.20 = \$30.28.$$

Section 49.
General Review.
Exercises 17-20.

Unit 10.

297

7. $\$ \quad ,285 = \$.29$ $\$ \quad ,177 = \$.18$

$8,120 \text{ mi.}) \begin{array}{r} \$2,315.000 \\ \underline{16240} \\ 69100 \\ \underline{64960} \\ 41400 \\ \underline{40600} \\ 800 \end{array}$	$13,068 \text{ km.}) \begin{array}{r} \$2,315.000 \\ \underline{13068} \\ 100820 \\ \underline{91476} \\ 93440 \\ \underline{91476} \\ 1964 \end{array}$
---	--

8. $100\% - 32\% = 68\%;$
 $\$146.00 \div .68 = \$214.71.$

9. $4 \times \$.625 = \$2.50;$
 $\$1,000 \div \$2.50 = 400;$
 $400 \times \$73.50 = \$29,400.$

20. Checkbook balance:		\$ 694.52
Less:		
Canceled check	\$ 19.38	
Service charge	1.55	
Amount on check (too small)	<u>9.00</u>	<u>29.93</u>
Sub-total:		\$ 664.59
Add: Deposit not recorded		<u>25.33</u>
Correct checkbook balance:		\$ 689.92

Unit 11.

Section 50.

Part 50a.

Exercise 1.

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Unit 11, Section 50.

1-1.	Assessed Valuation	Total Tax	Tax Rate
a.	\$3,000,000	\$168,000	0.056
b.	\$5,000,000	\$260,000	0.052
c.	\$4,500,000	\$153,000	0.034
d.	\$2,800,000	\$25,200	0.009
e.	\$4,250,000	\$97,750	0.023
f.	\$7,580,000	\$132,650	0.0175
g.	\$1,425,000	\$48,750	0.03421
h.	\$4,400,000	\$181,500	0.04125
i.	\$5,320,000	\$278,000	0.05226
j.	\$4,130,000	\$128,600	0.03114

1-2.	Assessed Valuation	Total Budget	Other Income	Paid by Property Tax	Tax Rate
a.	\$24,000,000	\$723,300	\$75,300	\$648,000	0.027
b.	\$10,250,000	\$548,600	\$52,500	\$496,100	0.0484
c.	\$8,375,000	\$495,000	\$15,000	\$480,000	0.0512

$$1-3. \$377,568 \div \$10,260,000 = 0.0368.$$

$$1-4. \$217,216 \div \$6,788,000 = 0.032.$$

$$1-5. \$966,000 \div \$46,000,000 = 0.021.$$

$$1-6. \$1,362,000 - \$228,000 = \$1,134,000;$$

$$\$1,134,000 \div \$25,200,000 = 0.045.$$

Section 50.

Unit 11.

Review Assignment 50a.

Exercises 1-7.

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1. assessment roll: (b) A list of property with assessed valuations.
 budget: (c) An estimate of expenses.
 decimal rate: (a) A tax rate shown as a decimal.

2. a.
$$\begin{array}{r} .013 \\ 760,000 \overline{) 9,880,000} \\ \underline{760000} \\ 2280000 \\ \underline{2280000} \end{array}$$
 b. June 2 to August 28:
 87 days.
 c. $\$545 \times 10\% (\$54.50)$
 for 25 days = $\$3.78$.

3. $\$796,650 - \$162,950 = \$633,700$;
 $\$633,700 \div \$9,000,000 = 0.07041$.

4. $\$6,700 \div \$1,000 = 6.7$;
 $6.7 \times \$57.213 = \383.33 .

5. $21 \text{ mi.} \div 45 \text{ min.} = 0.47$;
 $0.47 \times 60 = 28 \text{ mph.}$

6. $\$7,000 - \$1,400 = \$5,600$;
 $\$5,600 \div 5 = \$1,120$;
 $\$1,120 \div \$7,000 = 16\%$.

7. $30\% \text{ of } \$360 = \108 ;
 $\$360 - \$108 = \$252$;
 $\$252 \div 12 = \21 .

Unit 11.

Section 50.

Review Assignment 50a - Part 50b.

Exercises 8-9 (for Review Assignment 50a),
and Exercises 1-6 (for Part 50b).

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Review Assignment 50a (continued).

$$8. \$700 + \$1,596 + \$240 + \$830 = \$3,366;$$

$$\$7,680 - \$3,366 = \$4,314;$$

$$\$4,314 \div \$56,000 = 7.7\%.$$

$$9. a. \$4.80 \text{ is } 62\frac{1}{2}\% \text{ of } \$7.68.$$

$$b. \$6.58 \text{ is } 235\% \text{ of } \$3.50.$$

Part 50b: 2-1.	Principal Rate	Rate in Dollars per \$100	Rate in Dollars per \$1,000	Rate in Cents per \$1	Rate in Mills per \$1
a.	0.06718	\$6.718	\$67.18	6.718¢	67.18
b.	0.05052	\$5.052	\$50.52	5.052¢	50.52
c.	0.04825	\$4.825	\$48.25	4.825¢	48.25
d.	0.05022	\$5.022	\$50.22	5.022¢	50.22
e.	0.09034	\$9.034	\$90.34	9.034¢	90.34

$$2-2. \$557,194 \div \$11,780,000 = .0473;$$

$$.0473 \times \$1,000 = \$47.30.$$

$$2-3. \$276.08 \div \$9,400.00 = .02937;$$

$$.02937 \times \$1,000 = \$29.37.$$

$$2-4. \$382.50 \div \$8,500.00 = .045;$$

$$.045 \times \$100 = \$4.50.$$

$$2-5. \$583,540 \div \$16,300,000 = .0358;$$

$$.0358 \times \$1,000 = \$35.80.$$

$$2-6. \$2,268,000 - \$875,000 = \$1,393,000;$$

$$\$1,393,000 \div \$25,800,000 = .054;$$

$$.054 \times \$100 = \$5.40.$$

Section 50.

Part 50b - Review Assignment 50b.

Exercise 2 (for Part 50b),

and Exercises 1-4 (for Review Assignment 50b).

$$2-7. \quad \$584,625 - \$75,300 = \$509,325;$$

$$\$509,325 \div \$11,000,000 = 0.04630;$$

$$0.04630 \times \$1,000 = \$46.30.$$

$$2-8. \quad \$1,223,850 - \$578,660 = \$645,190;$$

$$\$645,190 \div \$9,100,000 = 0.0709;$$

$$0.0709 \times \$1,000 = \$70.90.$$

$$1. a. \quad 0.00963 \times \$1,000 = \$9.63.$$

$$b. \quad \$225 \text{ is } \frac{1}{6} \text{ smaller than } \$270,$$

$$c. \quad \$3.10 \text{ is } \frac{2}{3}\% \text{ of } \$465.00.$$

$$d. \quad \begin{array}{r} 6.2 \text{ m} \\ \times 5 \text{ m} \\ \hline 31.0 \text{ m}^2 \end{array}$$

$$. \quad \$2,308,282 - \$384,212 = \$1,924,070;$$

$$\$1,924,070 \div \$32,000,000 = 0.06013;$$

$$0.06013 \times \$1,000 = \$60.13.$$

$$. \quad 3:45 \text{ p.m. (15:45)} - 8:30 \text{ a.m.} = 7:15;$$

$$7:15 - 1:30 = 5:45.$$

$$. \quad \$1,338 + \$2,040 + \$216 = \$3,594;$$

$$9\% \text{ of } \$51,000 = \$4,590;$$

$$\$4,590 + \$3,594 = \$8,184;$$

$$\$8,184 \div 12 = \$682.$$

Unit 11.

Sections 50-51.

Review Assignment 50b - Section 51.

Exercises 6-7 (for Review Assignment 50b),
and Exercises 1-2 (for Section 51).

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Review Assignment 50b (continued)

5. $\$,1525 = \$.15$

$240 \overline{) \$36.6000}$

$\underline{240}$

1260

$\underline{1200}$

600

$\underline{480}$

1200

$\underline{1200}$

6. a. $\$2.10$ is $\frac{2}{7}$ of $\$7.35$

b. 16 is 300% of $5\frac{1}{3}$

7. $\$96 \times 6\frac{2}{3}\% = \6.48

$\$2,700 \div \$6.48 = 416.67$

Section 51.

Section 51.

	Amount of Sale	Sales Tax		Amount of Sale	Sales Tax
1-1.	$\$.36$	2ϕ	1-6.	$\$.67$	4ϕ
1-2.	$\$1.36$	7ϕ	1-7.	$\$1.59$	8ϕ
1-3.	$\$2.36$	12ϕ	1-8.	$\$3.15$	16ϕ
1-4.	$\$.82$	4ϕ	1-9.	$\$5.50$	28ϕ
1-5.	$\$2.82$	14ϕ			

2-1.	Item	Retail Price	Sales Tax Rate	Sales Tax	Total Cost
a.	8-track tape	$\$7.89$	3%	$\$.24$	$\$8.13$
b.	Watch	24.95	4%	1.00	25.95
c.	Saw	34.45	6%	2.07	36.52
d.	Clock	18.35	5%	$.92$	19.27
e.	Dress	39.95	7%	2.80	42.75

Section 51 - Review Assignment 51.
 Exercises 2-4 (for Section 51),
 and Exercise 1 (for Review Assignment 51).

Unit 11.

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2-2. $6,400 \div 100 = 64$;
 $64 \times \$1.23 = \14.72 ;
 $\$14.72 + 6\% (\$1.88) = \$15.60$.

3-1.	Item	Total Cost	Sales Tax Rate	Retail Price	Sales Tax
a.	Shoes	\$36.05	3%	\$35.00	\$1.05
b.	Wallet	8.84	4%	8.50	.34
c.	Suit	104.94	6%	99.00	5.94
d.	Ring	26.25	5%	25.00	1.25
e.	Shirt	16.05	7%	15.00	1.05

3-2. \$51,500 - total cost.
 3% - city sales tax.
 \$1,500 - total sales tax.

4-1. $\$94.00 \times 8\% = \7.52 ;
 $\$94.00 + \$7.52 = \$101.52$.

4-2. $\frac{1}{2} \times \$170 = \85 ;
 $\$170.00 \times 8\% = \13.60 ; $\$170.00 + \$13.60 = \$183.60$;
 $\$85.00 \times 8\% = \6.80 ; $\$85.00 + \$6.80 = \$91.80$;
 $2 \times \$183.60 = \367.20 ; $\$367.20 + \$91.80 = \$459.00$.

4-3. $\$12.50 + \$12.80 + \$2.00 = \27.30 ;
 $\$27.30 \times 2\% = \0.55 ; $\$27.30 + \$0.55 = \$27.85$;
 $\$27.30 \times 7\% = \1.91 ; $\$27.85 + \$1.91 = \$29.76$.

5. a. $\frac{1}{6}\%$ of $\$4,950 = \8.25 .
 b. $\$175$ is $\frac{4}{7}$ greater than $\$105$.
 c. $\$2,600 \times 9\% (\$234)$ for 90 days
 $= \$58.50$.

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Review Assignment 51
Exercises 1-8
(continued).

$$d. 42 \text{ mills} \div \$1,000 = 0.042.$$

$$2. \$48.95 \times 5\% = \$2.94;$$

$$\$48.95 + \$2.94 = \$51.89.$$

$$3. a. \$1,104,170 - \$186,300 = \$917,870;$$

$$\$917,870 \div \$43,600,000 = 0.02105;$$

$$0.02105 \times \$1,000 = \$21.05.$$

$$b. 0.02105 \times \$9,800 = \$205.29.$$

$$4. \$5,200 + \$4,100 = \$9,300;$$

$$\$9,300 - \$5,300 = \$4,000;$$

$$\$4,000 \div 4 = \$1,000.$$

$$5. \text{March 17 to May 31: 75 days.}$$

$$\$2,000 \times 8\% = \$160.$$

$$6. 400 \text{ grams} = .4 \text{ kilogram.}$$

$$60\phi = .06\phi \text{ per kilogram.}$$

$$7. a. \$345 \text{ is } \frac{2}{3} \text{ smaller than } \$1,035.$$

$$b. \$3.90 \text{ is } \frac{2}{3} \text{ greater than } \$11.70.$$

$$8. \$28.09, \text{ total sale,}$$

$$6\%, \text{ sales tax.}$$

$$\$26.50, \text{ retail price.}$$

See Part 2 of the same customized book (Pages 305 to 554).